

APPALACHIAN RENAISSANCE INITIATIVE

Educational Excellence in the Heart of the Mountains



Promising Practices Summit

October 24, 2014

East Kentucky Expo Center

“Innovation in Rural Education”



The Kentucky Valley Educational Cooperative (KVEC) is a public education agency governed by superintendents from the counties of Breathitt, Floyd, Harlan, Johnson, Knott, Lee, Leslie, Letcher, Magoffin, Owsley, Perry, Pike, and Wolfe along with independent districts in Hazard (Perry County), Jackson (Breathitt County), Jenkins (Letcher County), Middlesboro Independent (Bell County), Pikeville (Pike County), and Paintsville (Johnson County). These rural public school districts lie within the Central Appalachian Region of Kentucky and comprise an area about the size of Connecticut. East Kentucky Superintendents realized the necessity of such an organization in the early 1970's and KVEC was formed in 1972 to address the needs of rural school districts. The Cooperative serves as a regional public education entity, focusing attention on teaching, learning and leadership, maximizing educational opportunities, and contributing to a more effective use of resources.

U.S. Department of Education Race to the Top Award Recipient

“Appalachian Renaissance Initiative”

Investing In Innovation Award Recipient

“C3R - Creating College and Career Readiness”

Project Prevent Award Recipient

“Ripple Effects”

Kelly Literacy Leadership Award Recipient

Founding Member – Appalachian Innovation Collaborative

Programs Include: Special Education Cooperative; Perpetuating Excellence in Teaching, Leadership, and Learning (PETLL); Reading Recovery; Content Network Leadership Networks; Professional Growth and Effectiveness; Higher Education Collaborative; Student Readiness and Wellness; Student Agency; Purchasing and Procurement



Welcome Leader!

Welcome to the inaugural Appalachian Renaissance Initiative (ARI) Promising Practices Summit. The ARI definition of a leader is *“anyone who holds her or himself accountable for finding potential in people or resources”* and today provides all of us an opportunity to lead.

This Promising Practices Summit is a gathering of some of the most innovative educators in our region and in the United States. It is an opportunity to experience authentic and real world innovation taking place in our classrooms focused on personalized learning – and as importantly - engage with colleagues and learners to extend and deepen learning opportunities through professional dialogue.

ARI is a consortium project of school districts that make up the Kentucky Valley Educational Cooperative (KVEC). ARI includes a broad base of partnerships and collaborations with organizations and institutions capable of supporting, sustaining, and deepening significant innovation in rural public education, specific to advancing personalized learning, teacher and leader effectiveness, and college and career success.

ARI’s program implementation strategies include:

- Creating personalized learning environments in collaboration with students, parents and teachers
- Implementing Next Generation Classrooms in all participating schools
- Student participation in personalized learning and teacher professional development opportunities that focus on personalized learning
- Participation in P-20 Innovation Lab Teacher and Leader academies
- Perpetuating Excellence in Teaching, Leadership and Learning (PETLL) framework
- Implementation and use of the ARI data management system
- Development and implementation of social learning network for Central Appalachia, www.theholler.org
- Student engagement with instructional software focused on career and college success
- Collaboration with community and partners to engage parents and promote health and wellness

ARI’s approach to personalized learning is a blended model, combining delivery of quality instruction that results in significant learning in and out of the traditional classroom. ARI’s model involves the teacher, parent and learner in tailoring the learning approach for each student based on his or her needs and interests.

Partner districts and their key leaders are identified in the chart below:

District	Superintendent	Innovation Coordinator	Student Senate Members
Breathitt County	Larry Hammond	Susan Watts	Ally Spencer & Robert "Corey" Grigsby
Floyd County	Dr. Henry Webb	Courtney DeRossett	Jared "Tate" Green & Tyler Price
Harlan County	Mike Howard	Brent Roark	Jay Phillips & Abby Landis
Hazard Independent	Sandra Johnson	Vivian Carter	Lindsey Ambrose & Jack Davis
Jackson Independent	Kyle Lively	Jeff Coots	Noah Cornett & Shey Trent
Jenkins Independent	Freddie Bowling	Christle Carter	Ted Allen & Michaela Hardin
Johnson County	Tom Salyer	Noel Crum	Kealy Daniel & Michael Hamilton
Knott County	Kim King	Kelly Hall	Ashley Bergman & Morgan Sexton
Lee County	Dr. James Evans, Jr.	Steve Carroll	Dakota Ross & Beth Williams
Letcher County	Tony Sergent	Twyla Messer	Cameron Wright & Ashley Benton
Owsley County	Dr. Tim Bobrowski	Stacey Davidson	Colby Hudson & Thea Smith
Magoffin County	Stanley Holbrook	Angela Skaggs	Kelsey Cole & Dalton Howard
Middlesboro Independent	Steve Martin	Melissa Bailey	Noah Brown & Lauren Padgett
Paintsville Independent	Coy Samons	Bryan Auxier	Matt Miller & Kerrigan Samons
Pike County	David Lester	Mary Stiltner	Dalton Hatfield & Taryn Syck
Pikeville Independent	Jerry Green	Mary Belcher	Taylor Wells & Katie Atkins
Wolfe County Schools	Kenny Bell	Wilma Terrill	Amanda Trent & Taylor Rose

Critical and Significant ARI Partners

- Appalachian Regional Commission
- Center for Rural Strategies
- University of Kentucky P-20 Innovation Lab
- Next Generation Leadership Academy
- Appalachian Innovation Collaborative
- Asbury University
- University of Pikeville
- Morehead State University
- Eastern Kentucky University
- Kentucky Department of Education
- Cumberland Valley Area Development District
- Kentucky River Community Care
- SOAR – "Shaping our Appalachian Region"
- Appalachian Higher Education Consortia
- Forward in the Fifth
- Kentucky Highlands Promise Zone
- Kentucky Educational Professional Standards Board
- Kentucky River Area Development District
- Big Sandy Area Development District
- Challenger Learning Center of Kentucky
- Rand, Inc.
- UK Rural Health

Table of Contents

Schedule at a Glance	4 - 5
East Kentucky Exposition Center Maps	6 - 7
Breakout Session A	8
Breakout Session B	9
Breakout Session C	10
Breakout Session D	11
Student Senate Sessions	12
Student Senate Members	13 - 15
P-20 Innovation Lab Presentations	16
ARI Next Generation Teacher Leaders	17
ARI Next Generation Leadership	18
Project Prevent Grant	20
Session Descriptions	21 - 52
ARI Leadership Declaration	53





APPALACHIAN RENAISSANCE INITIATIVE

Educational Excellence in the Heart of the Mountains

Schedule at a Glance

Registration	8:00 – 9:00	Concourse				
Opening	9:00 - 10:00	Student Performance Gov. Paul Patton Gene Wilhoit Jeff Hawkins Gallery Walk				
		Ballroom A	Expo Floor	Boardroom	Upper Lobby	Ballroom B
Section A	10:00 - 11:00	Student Senate	Appalachian Innovations Collaborative	UK NxtGn	Innovative Educator Session A1	Innovative Educator Session A2
Section B	11:00 - 12:00	Student Senate		UK NxtGn	Innovative Educator Session B1	Innovative Educator Session B2
Lunch	12:00 - 1:00	Student Senate Working Lunch	Expo Center Main Floor			
			Lunch / Networking / KVEC Board meeting			
Section C	1:00 - 2:00	Student Senate		UK NxtGn	Innovative Educator Session C1	Innovative Educator Session C2
Section D	2:00 - 3:00	Student Senate		UK NxtGn	Innovative Educator Session D1	Innovative Educator Session D2
Closing	3:00 - 3:15	Evaluation / Door Prizes / Next Steps				

Innovative Educator Sessions Format

Facilitator Introduction *	5 minutes
Innovative Educator 1 Presentation	10 minutes
Innovative Educator 2 Presentation	10 minutes
Innovative Educator 3 Presentation	10 minutes
Innovative Educator 4 Presentation	10 minutes
Break/Transition to next session	15 minutes

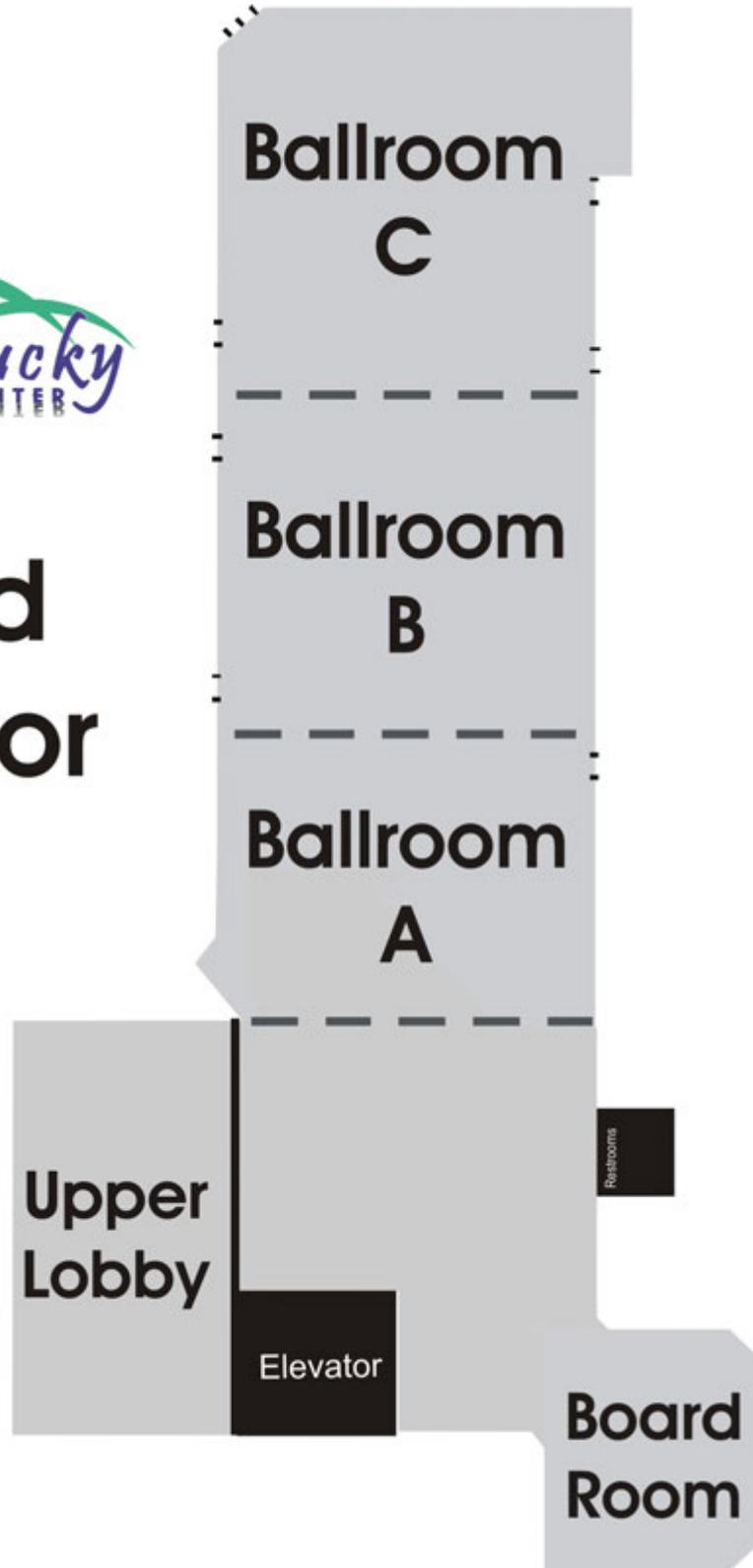
*Facilitator will carry out introductions and remind presenters/guests of the time allotted for each presentation. Facilitator will signal when 2 minutes remain as a reminder to presenters.

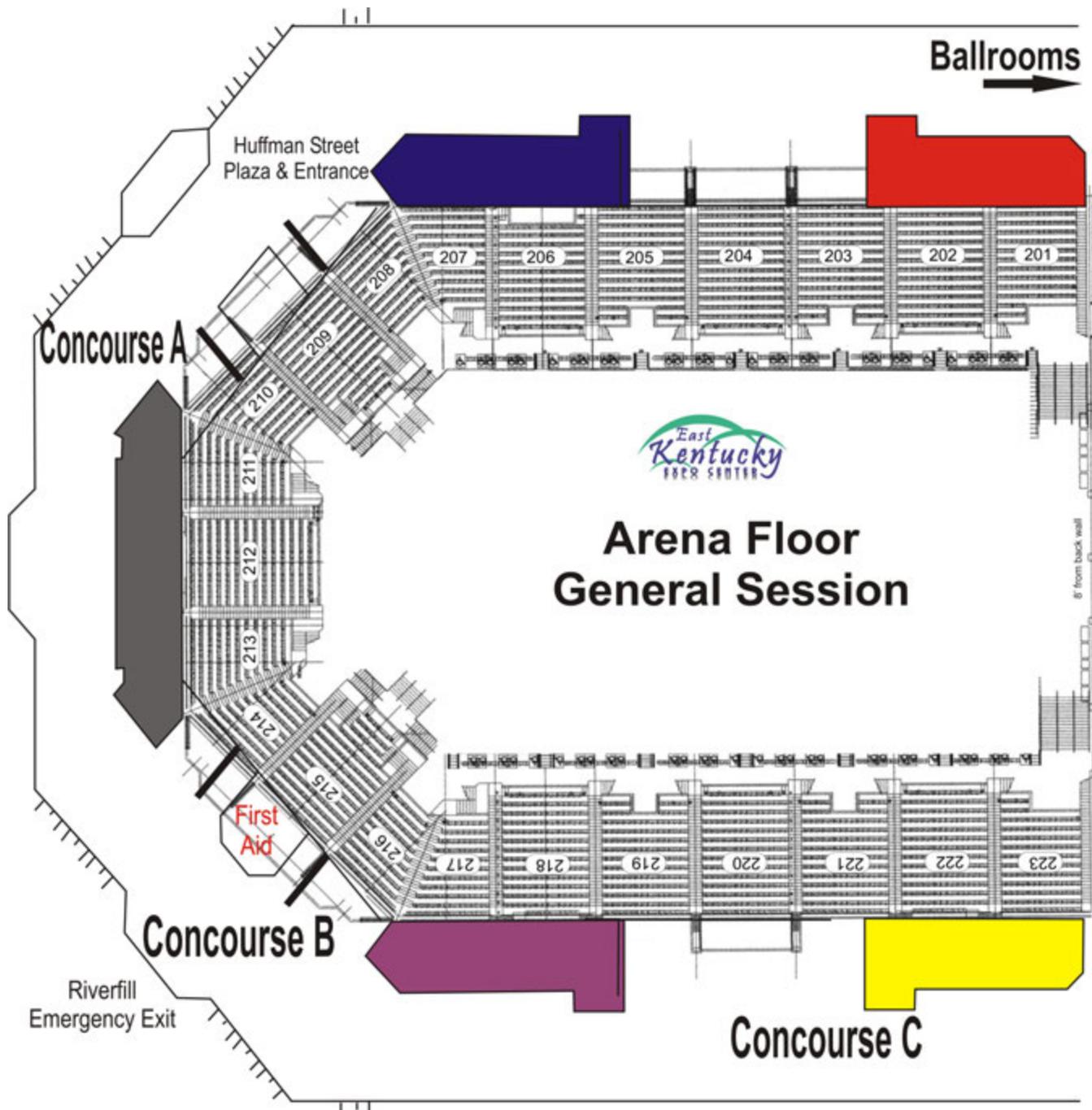
Registration	8:00 – 9:00	Concourse			
Opening	9:00 - 10:00	Student Performance Gov. Paul Patton Gene Wilhoit Jeff Hawkins Gallery Walk			
		Ballroom C	Concourse A	Concourse B	Concourse C
Section A	10:00 - 11:00	Innovative Educator Session A3	Innovative Educator Session A4	Innovative Educator Session A5	Innovative Educator Session A6
Section B	11:00 - 12:00	Innovative Educator Session B3	Innovative Educator Session B4	Innovative Educator Session B5	Innovative Educator Session B6
Lunch	12:00 – 1:00	Expo Center Main Floor			
		Lunch / Networking / KVEC Board Meeting			
Section C	1:00 - 2:00	Innovative Educator Session C3	Innovative Educator Session C4	Innovative Educator Session C5	Innovative Educator Session C6
Section D	2:00 - 3:00	Innovative Educator Session D3	Innovative Educator Session D4	Innovative Educator Session D5	Innovative Educator Session D6
Closing	3:00 – 3:15	Evaluation / Door Prizes / Next Steps			





2nd Floor







APPALACHIAN RENAISSANCE INITIATIVE

Educational Excellence in the Heart of the Mountains

10:00 AM – 11:00 AM	Breakout Session A	
	Student Senate	Ballroom A – Upper Level
	AIC	Expo Main Floor
	UK Next Gen.	Boardroom – Upper Level
	Innovation Educator Sessions	
	Concurrent Session A1 Presenter 1 – Amy Hollan Presenter 2 – Christy Webb Presenter 3 – Jacqueline Cornett Presenter 4 – Cathy Wright	Upper Level Lobby
	Concurrent Session A2 Presenter 1 – Elizabeth Minix Presenter 2 – Angela Tackett Presenter 3 – Angie Campbell Presenter 4 – Lisa Bevins-Salyer	Ballroom B
	Concurrent Session A3 Presenter 1–Latonya Taylor-Rowe Presenter 2 – Sammy Maynard Presenter 3 – Holly Penix Presenter 4 – Carolyn Bryant	Ballroom C
	Concurrent Session A4 Presenter 1 – Missy Davis Presenter 2 – Kathy Draughn Presenter 3 – Sandra Ramsey Presenter 4 – Cathy McCune	Concourse A
	Concurrent Session A5 Presenter 1 –Kenneth Combs Presenter 2 –Maria Montano Presenter 3 –Sherri Stewart Presenter 4 – Amy Howard	Concourse B
	Concurrent Session A6 Presenter 1 –Jennifer Hall Presenter 2 –Dawn Kinner Presenter 3 –Hans Doderer Presenter 4 –Jason Kinner	Concourse C

11:00 AM – 12:00 AM

Breakout Session B

Student Senate

Ballroom A – Upper Level

UK Next Gen

Boardroom – Upper Level

Innovation Educator Sessions

Concurrent Session B1

Presenter 1 – Deborah Lucas
 Presenter 2 – Sandy Arnold & Linda Begley
 Presenter 3 – Emely Sanders
 Presenter 4 – Jeanne Caudill

Upper Level Lobby

Concurrent Session B2

Presenter 1 – Fannie Hall
 Presenter 2 – Nikki Hunt
 Presenter 3 – Christy McCoy
 Presenter 4 – Carol Napier

Ballroom B

Concurrent Session B3

Presenter 1 – Debra Smith
 Presenter 2 – Amy Carter
 Presenter 3 – Charles Napier II
 Presenter 4 – Melissa Roark

Ballroom C

Concurrent Session B4

Presenter 1 – Rachel Holbrook
 Presenter 2 – Debra Sexton
 Presenter 3 – Edie Michelle Scott
 Presenter 4 – Donna Combs

Concourse A

Concurrent Session B5

Presenter 1 – Donna Huff
 Presenter 2 – Effie Sidham
 Presenter 3 – Jonathan Jones
 Presenter 4 – Ben Stephens

Concourse B

Concurrent Session B6

Presenter 1 – Karen Adkins & Stephanie Hammonds
 Presenter 2 – Karen Murphy
 Presenter 3 – Susan Kennon
 Presenter 4 – Larry Joe Begley & Dr. Will Kayatin

Concourse C





1:00 PM – 2:00 PM	Breakout Session C	
	Student Senate	Ballroom A – Upper Level
	UK Next Gen	Boardroom – Upper Level
	Innovation Educator Sessions	
	Concurrent Session C1 Presenter 1 –Stephanie Mullins Presenter 2 –Leslie Ousley Presenter 3 –Kelly Preece Presenter 4 –Kendra Staton	Upper Level Lobby
	Concurrent Session C2 Presenter 1 –Cheri Arrowood Presenter 2 –Alice Tackett Presenter 3 –Nickie Blackburn Presenter 4 –Christian Lawson & Stacey McCreary	Ballroom B
	Concurrent Session C3 Presenter 1 –Casey Salyers Presenter 2 –Triena Bowling Presenter 3 –Patricia Williams Presenter 4 – Maggie Roll	Ballroom C
	Concurrent Session C4 Presenter 1 –Stephanie Moore Presenter 2 –Lane Carr Presenter 3 – Linda Cokley Presenter 4 –Gene Booth	Concourse A
	Concurrent Session C5 Presenter 1 – Sherri Stewart Presenter 2 – William Cantrell and Jason Wheeler Presenter 3 – Angel Mobley Presenter 4 –Katricia Rogers	Concourse B
	Concurrent Session C6 Presenter 1 –Dr. Jaridas Chandran Presenter 2 –Sarah Kincaid Presenter 3 –Beth Thompson & Steve Koutoulas Presenter 4 –Traci Tackett	Concourse C

2:00 PM – 3:00 PM	Breakout Session D	
	Student Senate	Ballroom A – Upper Level
	UK Next Gen	Boardroom – Upper Level
	Innovation Educator Sessions	
	Concurrent Session D1 Presenter 1 –Shelia Varney Presenter 2 –Scott Hollan Presenter 3 –Erin Porter Presenter 4 –Melissa Sanger	Upper Level Lobby
	Concurrent Session D2 Presenter 1 –Selena Cochran Presenter 2 –Deborah Matney Presenter 3 –Kim Howard Presenter 4 –Whitney Alred	Ballroom B
	Concurrent Session D3 Presenter 1 –Megan Byers Presenter 2 –Jason Hall Presenter 3 –James Yount Presenter 4 – Allison Caudill	Ballroom C
	Concurrent Session D4 Presenter 1 –Amanda Fugate Presenter 2 –Myrtle Boggs Presenter 3 – Joanna Thompson Presenter 4 –Jerry Smith	Concourse A
	Concurrent Session D5 Presenter 1 – Shelia Stamper Presenter 2 – Tammy Childers Presenter 3 – Regina Donour Presenter 4 – Tyler Little	Concourse B
	Concurrent Session D6 No Sessions	Concourse C





Student Senate Sessions

10:00 AM – 11:00 AM	Session A
Breathitt Floyd Harlan Hazard Ind.	Robert “Corey” Grigsby & Ally Spencer Jared “Tate” Greene & Tyler Price Jay Phillips & Abby Landis Lindsey Ambrose & Jack Davis
11:00AM – 12:00AM	Session B
Lee Letcher Magoffin Middlesboro	Dakota Ross & Kara Beth Williams Cameron Wright & Ashley Benton Kelsey Cole & Dalton Howard Noah Brown & Lauren Padgett
12:00PM – 1:00PM	Working Lunch
1:00PM – 2:00PM	Session C
Pike Pikeville Paintsville Johnson Owsley	Dalton Hatfield & Taryn Syck Taylor Wells & Katie Atkins Matt Miller & Kerrigan Samons Kealy Daniel & Michael Hamilton Thea Smith & Colby Hudson
2:00PM – 3:00PM	Session D
Knott Jenkins Ind. Jackson Ind. Wolfe	Morgan Sexton & Ashley Bergman Ted Allen & Michaela Hardin Shey Trent & Noah Cornett Amanda Trent & Taylor Rose

Appalachian Renaissance Initiative Student Senate





APPALACHIAN RENAISSANCE INITIATIVE

Educational Excellence in the Heart of the Mountains

2014-2015 ARI Student Senate Members

Name	District
Robert “Corey” Grigsby	Breathitt
Ally Spencer	Breathitt
Jared “Tate” Greene	Floyd
Tyler Price	Floyd
Jay Phillips	Harlan
Abbi Landis	Harlan
Lindsey Ambrose	Hazard
Jack Davis	Hazard
Dakota Ross	Lee
Kara Beth Williams	Lee
Cameron Wright	Letcher
Ashley Benton	Letcher
Kelsey Cole	Magoffin
Dalton Howard	Magoffin
Noah Brown	Middlesboro Independent
Lauren Padgett	Middlesboro Independent
Dalton Hatfield	Pike
Taryn Syck	Pike
Taylor Wells	Pikeville Independent
Katie Atkins	Pikeville Independent
Matt Miller	Paintsville Independent
Kerrigan Samons	Paintsville Independent
Colby Hudson	Owsley
Thea Smith	Owsley
Ashley Bergman	Knott
Morgan Sexton	Knott
Amanda Trent	Wolfe
Taylor Rose	Wolfe
Ted Allen	Jenkins Independent
Michaela Hardin	Jenkins Independent
Noah Cornett	Jackson Independent
Shey Trent	Jackson Independent
Kealy Daniel	Johnson County
Michael Hamilton	Johnson County

2014-2015 ARI Student Senate Majority Leaders

Name	District	Email Address
Jayce Walker	Breathitt	Jayce.walker@breathitt.kyschools.us
Lori Bricken	Floyd	Lori.bricken@floyd.kyschools.us
Jeff Phillips	Harlan	Jeff.phillips@harlan.kyschools.us
Jocelyn White	Hazard	Jocelyn.white@hazard.kyschools.us
Phillip Angel	Lee	Phillip.angel@lee.kyschools.us
Faye Collier	Letcher	Diana.collier@letcher.kyschools.us
Justin Bailey	Magoffin	Justin.bailey@magoffin.kyschools.us
Laura Carter Stone	Middlesboro	ljcstone@gmail.com
Rosalind Stanley	Pike	Rosalind.stanley@pike.kyschools.us
Rebecca King	Pikeville	Rebecca.king@pikeville.kyschools.us
Bryan Auxier	Paintsville	Bryan.auxier@paintsville.kyschools.us
Chelsea Bailey	Owsley	Chelsea.bailey@owsley.kyschools.us
Sherri Cornett	Knott	Sherri.cornett@knott.kyschools.us
Chad Rudd	Wolfe	Chad.rudd@wolfe.kyschools.us
John Oliva	Jenkins	John.oliva@jenkins.kyschools.us
Jeff Coots	Jackson	Jeff.coots@jacksonind.kyschools.us
Noel Crum	Johnson	Noel.crum@johnson.kyschools.us



APPALACHIAN RENAISSANCE INITIATIVE

Educational Excellence in the Heart of the Mountains

P-20 Innovation Lab Next Generation Learning Academy Presentations

10:00AM – 11:00AM

Session 1

**Personalize Learning through Digital Conversion and Distance Learning
Floyd County, Owsley County, Harlan County, Paintsville Independent**

In this session you will learn how leaders in four districts are using technology as a powerful tool to shape the learning experience for students and better equip them for success in college and careers in the global workplace. From plans for a complete digital conversion to the implementation of a new technology skills continuum, next generation learning is here!

11:00AM – 12:00AM

Session 2

**Personalized Learning through Project-Based Inquiry
Breathitt, Hazard Independent, Letcher County, Knott County, Wolfe County**

In this session you will learn how school and district leaders are engaging students in Project-based Learning (PBL) by creating learning experiences that require students to think deeply about the content, work together to research and solve problems, and present evidence of knowledge, skills, understandings to audiences beyond the classroom.

1:00AM – 2:00AM

Session 3

**Personalized Learning through Standards-Based Grading and Reporting and Project-Based Learning
Jackson Independent, Magoffin County, Lee County, Pikeville Independent**

In this session you will learn how leaders are planning to implement Standards-Based Grading and Reporting to ensure all students are meeting the standards without grade inflation or an average of disparate activities that have the potential to create misunderstandings of mastery.

2:00AM – 3:00AM

Session 4

**Personalized Learning through a wide range of Innovative Practices
Jenkins Independent, Middlesboro Independent, Knott County, Pike County and Johnson County**

In this session you will learn about a host of innovative plans and promising practices that range from extended Career and Technical Education pathways, expansion of dual credit and Advanced Placement opportunities, conversion to STEM schools, and Project-Based Learning opportunities across a wide-spectrum of classrooms, grade levels and schools.

ARI NEXT GEN TEACHER LEADERSHIP ACADEMY PARTICIPANTS

Breathitt County

Jesse Bailey
Fannie Hall
Heather Griffith
David Napier
Deanna Moore
Cathy McCune

Floyd County

Amy Halbert
Justin Triplet
Joseph Bolden
Jessica Slone
Stephanie Samons
Lynn Handshoe
Lori Bricken
Kristen Hatfield
Meghan Slone
Amanda Baker
Lynn Duncan
Kelly Boles
Amie Hall
Janie King

Harlan County

Terri Jenkins
John Middleton
Kenny Hughes
Nancy Cantrell
Lisa Lewis
Tracy Spurlock
Chamayne Johnson
Serri Evans
Needham Saylor

Hazard

Independent

Triena Bowling
Kerry Kilburn
Effie Stidham

Jackson

Independent

Sylvia Havicus
Megan Byers

Jenkins

Independent

Azure Wright
Emely Sanders

Johnson County

Justin Arms
Kristy Frazier
Mellisa Crace
Amy Case
Stephanie Moore
Jamie Harless
Wendy Davis
Lisa Salyer

Knott County

Candace Nickles
Kimberly Mosley
Sherry Morgan
Kevin Combs
Cyndi Trent
Tonya Williams
Sherri Cornett
Savanna Crawford

Lee County

Tony Barrett
Joy Neace
James Dailey
Carol Napier

Letcher County

Myrtle Boggs
Misty Lowe
Lisa Braswell
Lane Carr
Amber Stewart
Valerie Spangler
Vanessa Vanover
Debi Sexton
Diana Faye Collier

Magoffin County

Dedria Carpenter
Jennifer Howard
Tara Howard
Elizabeth Tackett
Margie McCoy

Middlesboro

Independent

Jenna Voges
Evan Robinson
Billy Cottrell

Owsley County

Jason Hall
Jennifer Hall

Paintsville

Independent

Stephanie Tiller
Mark Shortridge

Pike County

Susanne Henson
Melissa Bebb
Stephanie May
Elizabeth Ramey
Michael Coleman
Suzanne Preece
Sarah Moon
Heather Ratliff
Johnda Damron
Teresa Hall
Cynthia Johnson
Melissa Mullins
Connie McKinney
Annette Ward
Melanie Belcher
Nickie Blackburn
Lindsay Branham
Jennifer Baisden

Pikeville

Independent

Traci Tackett
Michelle Scott

Wolfe County

Sally Stewart
Sasha Creech
Kristi Evans
Angie Halsey
Alberta Salyers
Brandy Williams





ARI NEXT GENERATION LEADERSHIP ACADEMY PARTICIPANTS

Breathitt County

Susan Watts
Larry Hammond
Donna Fugate
Wayne Sizemore
Phillip Watts
Derek McKnight
Will Noble
Ron combs
Reggie Hamilton
Lisa Miller
Michael Bowling

Floyd County

Dr. Henry Webb
Courtney
DeRossett
Kim Potter
Denise Isaac
Rebecca Ratliff
Carey Davis
Wes Halbert
Chuck Rowe
Larry Begley
Cassandra Akers
Tommy Poe
Kathy Shepherd
James Allen
Brook Moore
Anna Shepherd
Angela Duncan
Dale Pack

Harlan County

Brent Roark
Jody Gilliam
Jeff Phillips
David Hensley
Jonathan Perkins
Eric Perkins
Mike Scott
Jeanne Lee

Hazard

Independent
Sandy Johnson
Vivian Carter
Sondra Combs
John Quillen

Jackson

Independent
Kyle Lively
Jeff Coots
Dr. Stacy Linn
Jim Yount

Jenkins

Independent
Freddie Bowling
Christle Carter
David Lee
Serena Anderson
Stacy Collier
Sherry Wright

Johnson County

Noel Crum
Russell Halsey
Jeff Cochran
Phillip Estep
Shawn Castle
Sandy Music
Vanessa Davis
Steve Young
Robert Younce

Knott County

Kim King
Kelly Hall
Brent Hoover
Bobby Pollard
Brent Hall

Lee County

Dr. Jim Evans
Steve Carroll
Karen Angel
Maureen Patrick
Glenna Cummins
Graig Herald

Letcher County

Tony Sergent
Twyla Messer
Denise Yonts
Stacy Isaac
Gracie Maggard
Ricky Warf
Josh Yonts
Robert Hammonds
Wendy Rutherford

Magoffin County

Angela Skaggs
Chris Meadows
Garland Yates

Middlesboro

Independent
Steve Martin
Melissa Bailey
Anthony Maxwell
Bill Jones
Bob Bennett
Steve Ely

Owsley County

Dr. Tim Bobrowski
Stacey Davidson
Gary Cornett
Alan Taylor

Paintsville

Independent
Coy Samons
Bryan Auxier
Joseph Schmitt
Deborah Preston

Pike County

Mary Beth Stiltner
Danny Adkins
Barry Birchfield
Jimmy Tackett
Tonya Dillon
Mark Gannon
Mike Hamilton
Rhonda Jarrell
Kevin Justice
Robert Kiser
Angie Lester
Jill Maynard
James Mercer
Greg Napier
David Rowe
Amy Swiney
Chad Thompson
Gary Walton

Pikeville

Independent
Mary Belcher
David Thomas
Robert Jones

Wolfe County

Wilma Terrill
Amanda Perry
Brian Creech
Sam Dunn
Jeff Stamper
Nick Brooks



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KVEC Wins Highly Competitive Project Prevent Award

Kentucky Valley Educational Cooperative’s “Ripple Effects” proposal was chosen from more than 300 applicants as one of 22 programs approved for multiyear funding through USDE’s Project Prevent. The goal of Project Prevent is to reduce violence against children and youth, by addressing trauma-related mental health concerns that are often at its root. Five Kentucky Promise Zone communities have a prominent place in the program, which has been awarded \$2.28 million dollars over five years.

Ripple Effects is the name of the technology-based program selected to anchor this project. Listed on the National Registry of Evidence-based Programs and Practices (NREPP), it is the only children’s mental health intervention that is both comprehensive and technology-based. It is the only one that is adaptive both at the level of content and learning process, so that learners find and access what best fits their personal needs.

This funding will enable community-based, mental health partners to help participating LEA’s expand their capacity to meet the needs of students who have been exposed to pervasive violence and/or trauma, but who may be reluctant to access live services. Local schools and mental health partners will integrate Ripple Effects, *Whole Spectrum Intervention System* into current efforts to fill gaps in service.

“The intent of this project is to supplement and support, not supplant, the important work of counselors and mental health professionals. With widely separated schools in a time of dwindling resources, it’s not economically or practically feasible to have a counselor available for every student at the exact time that she or he is most open to talking with one, and many of our students have been taught never to talk to counselors, even if they are available. Ripple Effects gives us a way to bridge the gap between the need, availability, and desire for mental health supports, says Program Director, Dr. Dessie Bowling, who also cites today’s students increasing comfort with digital technology as a rationale for the project design.

During the first year the proposed project will scaffold an escalating implementation plan in ten schools, seven of which are in Promise Zone areas, and bring on successively larger cohorts of schools each succeeding year. Activities include: (a) systemically developing core social emotional competencies; (b) targeting group level risk factors such as ambivalence about school engagement/success; (c) linking individual students with private peer narrated motivational counseling and skill building to address trauma and behavior that are barriers to school engagement and success; and (d) providing high-quality professional development for school staffs and mental health partners to recognize the needs of children exposed to pervasive violence. Objectives are: (a) increase resiliency assets; (b) decrease behavioral referrals; (c) reduce absenteeism; (d) increase student achievement; and (e) decrease drop-out rates.

As part of the project Ripple Effects will replace the urban, hip hop look and feel of its teen software with a home screen that reflects an Appalachian sense of place, and add local youth voices and videos to the program. “In working with Kentucky Valley Education Cooperative (KVEC) our eyes were opened to how important a sense of place is to students in Appalachia,” said Ripple Effects CEO, Alice Ray. “If we want these students to identify with the social-emotional skill-building in the software, we need to reflect that sense of place.”



Promising Practices Innovative Session Descriptions





APPALACHIAN RENAISSANCE INITIATIVE
Educational Excellence in the Heart of the Mountains

Adkins, Karen and Hammonds, Stephanie

Grades 7-12 Special Education Resource Teachers
Paintsville High School
Project Title: Technology in Hand

The Technology in Hand project is designed to get useful handheld assistive technology into the hands of students with reading or general cognitive disabilities. Students will improve basic reading skills that will move them toward greater independence in comprehending written materials. Students will be taught to use the Quicktionary Reading Pen 2 to scan and read unfamiliar words and to use the pen's dictionary features. Teachers will use the Livescribe Sky Wifi Smart pens to add commentary to written class notes and to record words, definitions and examples for vocabulary study. Students will access the information using the pens or by viewing/replaying files on a computer, smartphone or tablet.



Alred, Whitney

Grade 4, Arts and Humanities, Writing, Social Studies, Writing
Rosspoint Elementary, Harlan County
Project Title: Percy Jackson: The Lightening Thief: A dramatic look at the elements in action



Students will build on their knowledge of the basic elements of drama to assess the upcoming play *Percy Jackson: The Lightening Thief*. The aforementioned play will be performed at the Eastern Kentucky University at the Center for the Arts on April 21, 2015 at 11:30 a.m. My 4th grade class will go on the campus of Eastern Kentucky University to watch the action-packed performance of *Percy Jackson*. Prior to attending the play, students will read the book in their Reading class and study the different elements of the book to help them gather background knowledge. The students will then perform a shortened version of the play in their Arts and Humanities class. Finally, the students will write a short comparison and contrast paper in their Writing class. The students will use all three works to differentiate the opposing author's views and their interpretations of the individual works. Students will be able to read the book, observe the play and then perform their own interpretation of the drama.

The elements of drama will come to life when students are able to utilize three methods of learning.

Arnold, Sandy and Begley, Linda

Kindergarten- Reading and Math
Southside Elementary, Lee County
Project Title: "Max"ing Out Learning in Math and Reading/Language Arts



This project proposes to "max" out student learning in math and reading/language arts through the use of MobyMax . Kindergarten students will use the apps available on the MobyMax to enhance their understanding of math and reading/language arts concepts. Through the use of the Moby program students will be provided individualized and differentiated learning! Personalized and Individualized instruction will be provided for each child in small groups and RTI groups. The Moby can also be checked out by parents to be used at home to help parents be more involved in their child's education and to strengthen the home/school relationship to further help students' learning and achievement. The MobyMax will also be shared

with first and second grade classes to maximize the benefits the tablets can provide to more students.

Arrowood Cheri

Grade 2, All Content
Jackson City Schools

Title of Project: SPROUT: We Grow and Change Together



The students will create a unique ecosystem where they will use 21st century tools to solve problems faced with plant life. In phase one, students will plan, design, and develop a greenhouse. They will plant seeds, chart growth, set up a digital camera to watch for disruptions to their garden, analyze problems that occur, and propose a solution to those problems. They will observe the growth of a variety of plants, research various plants for nutritious value and create writings to show their learning. These writings will be presented on Keynote presentations and accessed by use of QR Codes. During phase 2, students will work cooperatively with Robinson Forest partners to grow an outdoor garden.

Begley, Larry Joe and Kayatin, Dr. Will

Perpetuating Excellence in Teaching, Leadership & Learning (P.E.T.L.L.)
Allen Central High School and Kentucky Valley Educational Cooperative



The PETLL Initiative is structured to address the practical needs for instructional improvement that exist in today’s schools and districts. The goal of the Initiative is to create schools of excellence where every student is engaged in growing a staff’s capability to teach at an ever-expanding level.

The PETLL Initiative is a systemic process designed to address the two areas that have the greatest impact on student learning -- the classroom teacher and the building instructional leader – the two leverage points educators have the greatest ability to influence.

The initiative is based on the foundational belief that we are responsible to ensure a high quality learning experience for every student and supports the creation of a system where teachers will rise to their greatest ability level by establishing a culture of growth and excellence in instruction as the overarching goal.

Blackburn, Nickie A.

Grade 3, Science and Informational Reading
Southside Elementary, Pike County

Project Title: The Attraction is Obvious! Designing Maglev Train Systems Using Magnets



After discussing five different engineering projects, my 82 young scientists voted for the project that was the most interesting to them. The overwhelming choice was the study and design of maglev systems and their unusual use of magnets. Innovative “maglev” or magnetic levitation trains move by using magnets instead of wheels. They do not burn fossil fuels, but instead use the magnetic field created by the electrified coils in the guide-way walls and the track to propel the train. The technological innovation behind these trains will come alive for my young students in this transportation-engineering unit. They will send magnets sailing, help magnets hover, and poke around magnetic fields. With their new found knowledge of the science of magnets learners will use the engineering design process to design, test, and

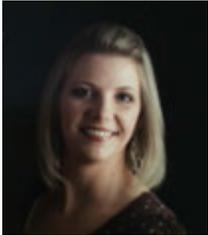
improve their own tabletop maglev transportation systems. In addition, my 82 scientists will partner with the East Kentucky Science Center in Prestonsburg for a day of hands-on instruction in the physical science area of forces and motion, and electromagnets. The learning targets for this instruction will come directly from the Next Generation Science Standards. At the end of this project, my students will participate in a community “review” of their maglev systems. Students will facilitate a presentation for local experts, community leaders and parents so they can take part in the learning.



APPALACHIAN RENAISSANCE INITIATIVE
Educational Excellence in the Heart of the Mountains

Boggs, Myrtle

Grade 8, Social Studies and Language Arts
Arlie Boggs Elementary, Letcher County
Project Title: I'm Just a Bill



Converting our classroom into a ‘courtroom’, we will have writing sessions where students learn the process of how a bill becomes a law relevant to citizens in Kentucky. Students will learn the correct form and terminology required for their chosen bills. Each bill will be debated (every student will have to study the other bills and decide to speak in favor or against these bills!). Students may lobby (or advertise) their bill to try and get the bill pushed through to become a law. They will create appropriate propaganda to advertise - just as a real bill would be treated. Flyers, posters, advertisement banners and information booths are all possibilities! After this session, all students will move on to a mock government that will have representatives from around 50 other middle schools throughout the state of Kentucky. Top ranking bills will move on to be presented in Frankfort at the Capital. Students will be able to create visual aids to display their ideas, some may choose to act as a page, while others show their debating skills. The ultimate goal would be having a bill so well written, presented and debated that it would end up on the desk of the governor to be signed into law.

Booth, Gene

Grades 9-12, Carpentry and Electricity
Breathitt ATC (KY Tech), Breathitt County
Project Title: Making solar power fun and Interesting for today’s youth



The project will incorporate both programs as they build team work skills and use other acquired skills to complete a finished product that is not only a learning opportunity for all involved but will also benefit anyone who views the completed “rolling lab”. All persons involved or viewing will have a better understanding of what types of components are used in making you own solar powered home. The rolling lab will allow students an interactive experience that will allow them to utilize the power that is being made by

acquiring the sun’s light. One side of the structure will have a large sign advertising exactly what is happening within the walls of the lab, another wall will clearly display the components being used with a brief descriptions of each component neatly wired together. A third wall will allow for a charging station that can be viewed by everyone who stops by to view the lab. And the fourth wall will have a video gaming system that will be sure to draw nothing but pure attention from the targeted audience which is today’s youth.

Bowling, Erin

Grade 1, All Content
Porter Elementary, Johnson County
Project Title: Minis for My Minis



Have you seen how little hands can maneuver technology devices? My first grade students will enhance their reading skills as they use an app called Book Creator to create a multimedia eBook. Over three million media eBooks have been created with the app. Our first grade students will learn to add text, images, video, audio, and much more as they work together to create a single book for the classroom. As students become more comfortable they will begin to create their own books. We will use our knowledge of different genres to create a variety of books to be shared with other classrooms. Students will create fiction text as well as non-fiction text and present their eBooks to everyone who attends the open house event in the spring.

Bowling, Triena

Grade 6, Language Arts

Hazard Middle School, Hazard

Project Title: TRIENA'S TABLET TIME!



Technology and blended learning will be 'what's going on with Triena's Tablet Time! My 6th grade students will integrate technology as they design and complete projects. Our blended learning classroom will consist of three stations. The Personalized Learning Station 1, will be revolve around small group instruction where students receive additional support; Station 2 is where a small group of students will be working independently, and Station 3 will be a small group of students working on the tablets. The students will use the tablets to complete their chosen projects. Blended Learning Projects: create screencasts, capstone projects, complete assignments or make posts on Edmodo, do research on various topics we are studying or writing about, and on reading and writing gaming websites like Mobymax and Learning Farm.

Bryant, Carolyn

Grades 7th and 8th, FMD-All Contents

Sebastian Middle School, Breathitt County

Project Title: A Bridge In the Gap



Through this project we will "Bridge a Gap" for many of our students who face numerous academic challenges. We will utilize technology to bridge the gap for our FMD students. Students will use technology when mainstreamed in the 'regular' classrooms. Students who are hearing impaired and use sign language will have access to several programs that will help them start reading. One such program is ABC ya.com that teaches the basics will help with their math skills, not to mention eye hand coordination. We will also be using Cool Math that aids in fine motor skills.

Byers, Megan

Grade 5, Mathematics

Jackson City Schools

Project Title: Digital Math Across the Seas



Our classroom of 24 fifth grade students will be embarking on a voyage to bring digital math videos to less fortunate students across the world. Students will use technology to create instructional math videos focusing on standards for geometry and measurement/data. These videos will be vetted and then sent through the "E-luminate" organization to students in African countries of Uganda, Ghana, and Sierra Leone. This is an organization that collects digital files to be sent to centers in the countries mentioned. It is through these videos that I hope not only the fifth grade students that I teach, but also other students will master skills related to geometry, measurement, and data.



APPALACHIAN RENAISSANCE INITIATIVE
Educational Excellence in the Heart of the Mountains

Campbell, Angie

Grade 3, All Content

Jackson City Schools

Project Title: C.Y.C.L.E.S. Communities and Youth Collaborate to Learn Environmental Science



Students will collaborate with parents and professional partnerships to embark on a “growing” experience in education and through plant life cycles as well. In phase one, students will plan, design, and develop a greenhouse. They will choose plant seeds, chart growth, photograph and analyze plants at various stages of their life cycle, analyze problems that occur during growth, and propose a solution to those problems. They will observe the growth of a variety of plants, research various plants for specific life cycles and create writings to demonstrate their learning. These writings will be presented on Keynote, or iMovie presentations and accessed by use of QR Codes. During phase 2, students will work cooperatively with Robinson Forest partners to grow an outdoor garden.

Cantrell, Matt & Wheeler, Jason

Grades 11 and 12

Johnson Central High School, Johnson County

Project Title: American Seminar



As the history element transitions from Pre-Civil War to Reconstruction, the English component will also undergo a shift in emphasis from rhetoric (rhetoric modes of writing, rhetorical appeals etc.) to literary studies. The reading in the English course will no longer be model methods of composition: now it will reflect the historical periods being studied. Toni Morrison’s novel *Beloved*, not only supplements the historical discussion of the period but it also provides a complex, college level text to practice the close, careful reading required in an introductory literature class. In addition, the students will use the opportunity that comes from studying *Beloved* alongside Reconstruction to learn/demonstrate research skills with literary criticism as well as primary historical documents such as newspaper accounts of Margaret Garnet’s escape from slavery. The video conferencing features of the Mondo Pad will feature heavily in our planning, as we hope to communicate with experts in literary and historical fields where applicable.

Carr, Lane

Grades 6-8 Science

Letcher Middle School, Letcher County

Project Title: Getting Our Hands Dirty --Gardening in the 21st Century



Our 21st Century Garden allows students in the 6th, 7th, and 8th grades an opportunity to get their hands dirty while engaging in the science, the business of selling and marketing produce, and communication of outcomes. Students learn that gardening doesn’t have to be an archaic practice. It can be enhanced through 21st century technologies. Our students and school lie within a USDA “food desert” meaning students have low or limited access to fresh and healthy foods. Our school has worked with the Farm to School Program and has successfully sold produce to our school. Our students, with limited access to fresh foods, have the opportunity to expand their access by growing healthy foods themselves. The Garden Initiative empowers youth, allowing them to take their knowledge home, and further growing their entrepreneurship and self-reliance skills. Expansion of the project would come in three basic areas: First, expansion of the physical garden. Second, students would better record garden yields and practices using technology. Finally, students will be learning the fundamentals of marketing their “products.”

Carter, Amy

Grade 5, Reading
Southside Elementary, Pike County
Project Title: Engineering: Innovation for All



My project is part of a multi-disciplinary STEM unit that will be implemented in my classroom and those of my colleagues. The unit is designed to provide our students with the background knowledge and requisite skills necessary to complete a project-based learning activity, designing original inventions to assist individuals with disabilities in completing everyday tasks. At the end of the unit, our students will demonstrate their inventions to parents and community members as part of an *Inventions Expo*. In my classroom, students will utilize available technology and appropriate communication skills to devise an online survey and/or conduct interviews seeking the community’s assistance in identifying areas of need or concern for individuals with disabilities. After the interview process, cooperative groups will establish their invention production timelines, based on the step-by-step process presented in a chosen nonfiction text. The goal of the project is to spark the students’ ingenuity through the use of engineering skills and inspire empathy for others through the creation of their inventions.

Caudill, Allison

Grade 7- Social Studies
Johnson Central Middle School, Johnson County
Project Title: AWPTIC



AWPTIC is a program designed to engage students in analyzing the perspectives of different individuals and groups by increasing communications with people of other countries. Students will interact with English-speaking students in countries such as France, China, and Japan. During the school day, my students will have the opportunity to use the Windows Surface Pro to create emails, videos or live video messages in which they pose questions about historical and current events. Their international partners will respond and pose questions for my students. This line of communication will help both the students here and the international students recognize how different people around the world have different outlooks on history and current events. The new perspectives that my students encounter will be shared with their class during the project presentations in March.

Caudill, Jeanne

Grade 1- All Content
Mullins Elementary, Pike County
Project Title: Good Day Kentucky!



In order to help students understand life in Kentucky long ago, the students in my class will create videos in a format similar to “Good Morning America” using Microsoft Word, Internet Explorer, the camera on an iPad, and a video-editing app. While creating the show “Good Day Kentucky”, the students will create this program with news, weather, sports, cooking, lifestyle, historical segments, and music. Students will compare and contrast life in Kentucky to today’s society. This project will begin with a field trip to Mountain Home Place in Paintsville, Kentucky, where the students will learn about attending a one-room school to accompany the language arts unit titled “Back to School”. As the school year progresses, the students will culminate units about Responsibility and Geography with similar videos. In the end, the students will gain a better understanding of life in Kentucky both today and during a long ago time period.



APPALACHIAN RENAISSANCE INITIATIVE
Educational Excellence in the Heart of the Mountains

Chandran, Dr. Haridas

Grades 9-12, Project Based Study- Seniors in Physics Class

Belfry High School, Pike County

Project Title: Synthesis of Gold/Silver Nanoparticles Using Appalachian Herbs: A Cancer Cure



Students at Belfry High School will collect specific herbs from the mountains near Belfry area that are rich in sulfur content to synthesize gold nanoparticles. They will use inductively coupled plasma spectrometer at University of Kentucky laboratory to identify the concentration of the sulfur from the collected herbs. The herbal solution will be prepared and the gold nanoparticles will be synthesized using herbal solution as capping agent at our facility. An ultraviolet spectrometer will be used to find the Plasmon frequency to qualitatively determine the size of the synthesized nanoparticles. The colloidal solution will be transported to University of Kentucky or Louisville speed research lab to experimentally determine the shape and size of the particles. This will be achieved by using the Scanning Tunneling electron microscope. Students will use Mie Theory a modeling program to determine the extinction coefficients. From these extinction coefficient parameters the mass of the nanoparticles, and the number of nanoparticles will be in a given volume will be calculated. Students will be encouraged to attend a state or national conference to present their data to the scientific community.

Childers, Tammy

Grades 11-12, Anatomy and Physiology

Knott Central, Knott County

Project Title: HEALTH CARE CAREERS ON THE MOVE!



Students in Anatomy and Physiology I and II are able to learn about careers through job shadowing health care professionals; including nurses, doctors, chiropractors, pharmacists, veterinarians, dentists, physical and other therapists, radiographers, physician assistants, lab techs, and several others, both at the hospital and private practice settings. Students are transported to specified locations and return 3 hours later. Students continue learning through visiting Health Career Fairs and participating in hands on health related activities that include visit the cadaver lab and the “Bodies Revealed” exhibit for a practical application of their anatomy class in identifying all visible body parts, comparing cadaver parts and possibly determining cause of death. This hands-on experience is one they will never forget. These experiences can be priceless, as students prepare for college and choose a major.

Cochran, Selena

Grade 2, Science Engineering

Porter Elementary, Johnson County

Project Title: Lego Education



The four Cs are used in LEGO Education design. The LEGO learners are given an open-ended task that allows them to find their own solution to the challenges placed before them. The active engagement of students in problem solving encourages them to **connect** to their own interests and motivations. Students are encouraged to ask questions and explore ideas to connect their newly acquired learning to their existing knowledge and areas of interest. The core of every LEGO task involves building. By actively learning through tactile experience, students **construct** knowledge in their minds. Students also construct knowledge with others in group settings, where collaboration extends their learning even further. Students are given the opportunity to consider what they have learned through the construction activities. Through **contemplation**, students ask reflective

questions about both the content and process of their learning. These questions are designed to help learners gain awareness of the process in which they are engaged, and to encourage exploring new ways to go about finding solutions to the challenges set before them. Every LEGO task ends with a new task that builds on what has just been learned. Thus, students are encouraged to **continue** their exploration and extend the experience beyond the classroom.

Cokley, Linda

Grade 6, Literacy (Both reading and writing components)

Pikeville Elementary

Project Title: The Horrible Herdsman



This project is designed to lead students to a deeper understanding of both the reading and writing processes and to appreciate the skill and craft involved in each. In reading class students will construct plot mountains and timelines to analyze the plot of the story. They will create paper dolls and stick puppets of characters that will show how the characters change through the course of the story. After hearing the story read, seeing the movie version and watching the stage play, students will be able to compare and contrast the modes of presentation. Writing class will provide students the opportunity to analyze the theme of the literature. “Don’t Be A Herdman” will be the target of the iMovie presentation. Possible topics will be targeted. Teams will be formed to create iMovies with a designated purpose. Of course, storyboards and scripts will incorporate the writing process prior to

actual iMovie production. Shared learning will be through movie postings on teacher webpages and “The Holler”. It is also hoped that this iMovie can be shared with other levels as an anti-bullying tool and possibly as an STLP production.

Combs, Donna

Breathitt County High, Breathitt County

Breathitt High School, Breathitt

Project Title: Bringing Art to Life



“Bringing Art to Life” project will assist Special Needs students as they participate in high school classes. One talented, autistic student who has a talent for bringing his words to life, through his artwork will be able to share his gift with students throughout the ARI region. With this project, the English teacher will be collaborating with the Technology teacher who will allow this student to work with his peers who will assist him in conveying experiences, imagines, thoughts and feelings through the world of Art. These students will combine the elements of writing with technology to create, refine and collaborate with peers to bring these concepts to life.

Combs, Kenneth

Grades 9-12

Breathitt County High, Breathitt County

Project Title: Outdoor Classroom



The senior led class of students had a vision to improve their school while making part of their campus more accessible. Currently our school has an outdoor area that is very dilapidated and run down, hard to maintain, and basically an eyesore. This group wants to improve the appearance of our school b using the main entryway as a canvas in which each student has the opportunity to leave their mark. A ceiling tile mosaic as well as personal pieces from the art class will be displayed by changing out ceiling tiles. Reduce, Reuse, Recycle could be implemented in the project due to the ability to recycle stained 24” by 23” ceiling tiles to use as our canvas. Students envision totally landscaping the outdoor area and making it an outdoor classroom. Students are going to plant

memorial trees for students that are no longer with them.



APPALACHIAN RENAISSANCE INITIATIVE
Educational Excellence in the Heart of the Mountains

Cornett, Jacqueline

Kindergarten, All Content

Roy G. Eversole Elementary, Hazard

Project Title: Osmo and Me: Our Path to Learning



Kindergarten students will be able to utilize technology to work in a collaborative setting to build skills in math and language arts. Students will use the Osmo game system to recognize and then compose simple shapes to form larger shapes in a tangram game. The word game will challenge my more advanced students to look at a picture on the screen, decode the word, and spell it (on the ‘playing field’) using the included letters. Students who are not ready to spell complex words will be able to use this game to practice their isolation of the initial, medial vowel, or final sounds in words. Using the third Osmo app that is currently available, Newton, my students can hone their problem solving and critical thinking skills with what will perhaps be the most thought-provoking, exciting, and fun game for my students. They will get creative using paper, writing tools, and even real objects to guide a bouncing ball into a targeted zone. The flexibility and the opportunities for challenge in the

Osmo games will allow me to create a more customized learning path for all of my students.

Davis, Missy

Grade 8, Math

Johnson County Middle School, Johnson County

Project Title: I’m Present Even When I’m Not



The project will consist of me videotaping introductory lessons and activities, each recording will be added to both the cloud and “The Holler” as well as used for following class periods that day. This will allow me to be more of a facilitator and help students more individually during the lesson. Students who are absent will be directed to the recorded lessons to get them caught up with their peers. I also plan on using this tool to pre-record lessons for students on days that I may be absent. I want students to provide feedback on how effective and useful this tool is for them, so I will ask students to complete a questionnaire to describe their feelings toward shifting my classroom to a more digitalized setting. Upon receiving and getting the technology set up in my classroom, the lessons

will be recorded daily, with the exception of assessment days.

Doderer, Hans

Grades 8-12, Science

Paintsville High School, Paintsville Independent

Project Title: Reducing Our Environmental “Paw” Print



The solar panel project at Paintsville High School will be used to develop new educational activities to integrate with existing curricula, including the New Generation Science Standards (NGSS). The solar installation will promote our school’s on-going environmental education program and be used to promote conservation practices within our school and ultimately our community. Utilization of solar energy on campus will build upon current energy conservation practices and serve as yet another way to reduce our carbon footprint. The proposed project will allow for discussions about climate change, the greenhouse effect, renewable energy sources, and conservation. In addition the advantages and disadvantages of solar energy used in Kentucky as a realistic alternative to fossil fuels will be examined.

The project will also connect students to a variety of science concepts and issues within the following areas: Sustainability/Carbon Footprints; Renewable Energy and Solar Energy (active and passive systems); Climate Change (causes, evidence of and skeptics of climate change, and current climate models); Engineering and experimental design; Energy transformations, Electricity: voltage, amperes, current, resistance, and Electrical Circuit

Donour, Regina

Grades 11 and 12- Chemistry

Letcher County Central High School Project

Title: VISITING PRISTINE AREAS IN MY COMMUNITY



Forty-five students will have the opportunity to DO science and not just LEARN science. Class trips to Bad Branch Falls and Pine Mountain Settlement School will allow students to experience the environmental programs available at both locations. At Bad Branch Falls students will examine water quality, macro-invertebrates (insect larva), and the flora and fauna of the Nature Preserve Area. Students will run dissolved oxygen, pH, and temperature data with LaMotte kits. The use of technology with CBLs and probes to determine turbidity and flow rate will be used to gather data regarding the water quality and the impact on the aquatic food chain. Students will collect the various taxa of macro-invertebrates in the stream of Bad Branch and determine the quality of the water. Students will hike to the falls (about two

miles round trip) with a biologist to examine the flora and fauna. The first-hand experience will strengthen student skills for developing and using models.

Draughn, Kathy

Grade 8, Library Class

Carr Creek Elementary, Knott County

Project Title: The Forgotten Ones



During library class students in the 8th grade will perform a dramatic interpretation of a published skit “The Forgotten Ones” written by Gina Belt and Mary Fetzner (teachers at North Elementary School in Crystal Lake, Illinois). They will present the skit live for staff and students the second semester of school. The project will be videotaped for future sharing purposes and as evidence of student learning. The students will learn how technical elements of drama such as staging, props, and costumes enhance the acting process. As a result of this project the students will develop valuable performance skills such as speaking and nonverbal expression that will help them in core content classes.

Fugate, Amanda

Grade 7th and 8th –History

Carr Creek Elementary, Knott County

Project Title: “Carr Creek Legacy Murals”



The 7th and 8th grade students will create a mural for their peers to observe and interpret. Legacy murals will consist of our two 8th grade classes, in addition, our grade classes will assist in order to help with their transition and get a basic idea of how the project is constructed. We are projecting 68 students for our mural. The mural will consist of a space designated by our principal that can be observed by both peers and parents. It will demonstrate school spirit, the legacy of our upper classmen, and teamwork with collaboration. Students are expected to have a working knowledge of principles and elements, three mural studies to complete, three acrylic projects to complete, and a reveal of their mural.



APPALACHIAN RENAISSANCE INITIATIVE

Educational Excellence in the Heart of the Mountains

Hall, Fannie

Grade 2, All Content

Marie Roberts Elementary, Breathitt County

Project Title: Next Generation Science Lab



The entire elementary school (approximately 300 students) will have access to our Next Generation Science Lab". This science lab will enable us to promote Project-Based Learning and individualized learning projects to develop critical thinkers at an early age and encourage life-long learners. Enthusiastic and successful student scientists will be the norm for 2nd graders here at MRC Elementary

Hall, Jason

Grade 6, Math, Science, Social Studies, and Reading

Owsley Elementary, Owsley County

Project Title: Using "Swivl" to get flipped



It is my intention to use the Swivl technology to allow me to "flip" my classroom, especially in the content areas of science and social studies. I intend to use my planning period or time before the start of the school day to video myself presenting information. Students will then be able to watch the presentations at their home. When they come to school we can use class time for students to complete projects/assignments. Students will also be able to use the Swivl technology to help them record their own presentations, which will be made available to other students not just at our school but to students within the collaborating partnership.

Hall, Jennifer

Grades 9-12, Science

Owsley County High School, Owsley County

Project Title: Exploring The World We Do Not See



Life is abundant on Earth. Many forms can be seen with the human eye, but there is also a significant amount that requires the aid of a magnifying glass or microscope. The purpose of this project is to introduce high school science students to that tiny world by helping them gain better understanding of biological processes such as symbiosis, succession and feeding strategies through scientific inquiry and real-life applications. The project will consist of a series of investigations using the text *Explore the World Using Protozoa* and will continue throughout the school year. Protozoa are organisms that perform within a single cell all activities necessary for life such as reproduction, obtaining food and responding to the environment. The grant will be used to purchase microscopes for students to study this diverse life form. By using protozoa, students will learn, in addition to the biological processes, technical skills such as microscopy and working with lab equipment, inquiry skills and problem solving. Not only will the students be able to study protozoa in the classroom, but the purchase of the microscopes can also put the students into roles of scientists and explore careers such as ecologists (determine the purity of streams in our community), microbiologists (examine bacteria and fungus), hematologist (look at human blood cells) and forensic scientists (examine hair and clothing fibers). With the added technology of the next generation classroom, students can be exposed to a world of science they never knew existed.

Holbrook, Rachel

Grade 7, English/Language Arts

Johnson County Middle School, Johnson County

Project Title: One Note Close Reading & Annotation: An Interactive Approach for Tackling the Text



Initial instruction for close reading annotation strategy will be taught using excerpts from Lois Lowry's *The Giver* during the first major unit of the school year. The teacher will use the MS Surface Pro 3 to take pictures of the text to be used for active modeling of text annotation. The instruction and teacher Think Aloud will be recorded for absent students and others to review as needed. (Any student who does not have access to technology at home to view the recording will be allowed to use classroom and computer lab computer).

Hollan, Amy

Kindergarten, All Content

Jackson City Schools

Project Title: Kindergarten Corner Blog/Digitally Created Virtual Field Trips



What does the world look like through the eyes of a kindergarten student? Throughout the year, Students will use the technology to create a video/photo journal of the year's events that will be displayed on a weekly Kindergarten Korner Blog. Each child will learn to use the camera and the video option on the I-pads to document the year's events, specifically our journey through the alphabet. Throughout the project we will collaborate with community members/organizations. The final culminating activity will be a video presentation of our journey through the year. The video presentation will be shown to the students who will be entering my classroom next year, parents and the community at graduation. It will be aired on our school TV station, and uploaded to my class's web page. In addition the students will create a virtual field trip to the Louisville Zoo. This will allow future students to have these experiences through the eyes of a Kindergarten student.

Hollan, Scott

Grades K-6, Arts and Humanities

Marie Roberts Elementary, Breathitt County

Project Title: Dancin' and Drummin'



A professional dance instructor whom will instruct 10 classes of MRC students will provide dance instruction. Terminology will be defined, demonstrated and reviewed almost every day to ensure that learning is taking place. Students will demonstrate applications of dance terms. Review and reflections will take place to ensure students get the opportunity to reflect on their learning and experiences. Notebooks entries will record their initial thoughts and feelings about learning a dance. Dance will be taught to all students either by dance instructor or arts and humanities teacher. Drumming will be a cross-curricular activity as initially drumming to the beat of the tribal dance as drum will be an authentic or near as authentic as possible. Drumbeat to the tribal dance will be taught to the drummer of the class. Class will dance to various drum dances taught by dance instructor. Drumming to teach math cross curriculum will involve drumming to ascending counting by ones, twos, and 10s. Upper Elementary will count ascending and descending by prescribed values. Upper primary will play various multiplication games. Pre drum assessments will be given and post drum assessments will be given to ensure gains in learning. Drum drills will be a daily occurrence in class. Competitions will ensue to determine the best, brave, drum math warrior. If a willing applicant can be located and secured, the students will take a live virtual field trip/phone call to a primary source i.e. tribal leader, museum curator/educator, drum maker...via our Mondo technology. A series of questions will be asked in order to gain firsthand insight into the tribal life, as it is today and how it once existed.



APPALACHIAN RENAISSANCE INITIATIVE
Educational Excellence in the Heart of the Mountains

Howard, Amy

Grade 10, Biology
Prestonsburg High School, Floyd County
Project Title: Little Things Make a Big Difference STEM Grant



The Little Things Make a Big Difference Project will support a more hands-on approach for the biology student. It is designed to introduce students to modern research techniques in the areas of cellular biology and genetics. Students are curious by nature. They see these crime scene investigations on television and want to do these experiments. They do not want to sit in a classroom taking notes all day listening to their teacher lecture. By making the classroom more inquisitive, the Hands-On learner can see it, touch it, smell it, etc. Students will first learn to use the microscopes based on what the teacher has presented on the Elmo microscope. The students will have either prepared slides or make their own slides. Next, we will progress through cell theory and cell division, leading into genetics. To introduce genetics, the students will do a lab called Genes in a bottle, leading into gel electrophoresis and finally into forensic crime scene investigation.

Howard, Kim

Grades 3 & 4, Science
North Magoffin Elementary, Magoffin County
Project Title: Engineering in Education



The LearnPad Quarto Student Ready Bundle will enable students to have everything they need for a complete learning experience. Students will be able to do more complete research for their lessons and take virtual tours of places that they would never be able to visit any other way. They will also be able to build their designs for science experiment, test them and have the capabilities to reconfigure their design or proceed with the construction process. The addition of these tablets to the classroom will allow my students the opportunity for a more innovative, rigorous, and personalized learning climate.

Huff, Donna

Allen Central High School, Floyd County
Grade 11-Mathematics
Project Title: Student's Teach



Plan scores and a list of students that scored 10 or below on a possible 16 on the Algebra subtest were reviewed. Five areas were found to be problem areas. Students in the junior skills classes will be assigned one of the problem areas to teach to the class. They will have "student choice" on how they teach the content. A video will be made for each group. A rubric will be used to determine the accuracy of the content and on each student's participation. Teachers will design the rubric and review it with the students before assigning the videos. Teachers will give post-test on the content that will be covered before the class views the video. Then after the video, the teacher will give practice problems. After practice problems, a test will be administered to see if the students improved their scores. After videos have been viewed by the math teachers they will be made available to the entire student body by way of the library, blackboard, and teacher websites. Students will be able to improve on their math skills, which will help them with ACT scores, remedial classes, and Compass.

Hunt, Nikki

Grade 2-Math, Science and Social Studies
Southside Elementary, Pike County
Project Title: Hang Tight To Our Land



Flash flooding has changed the shape of our land and eroded away our precious soil leading to mudslides that have destroyed homes and businesses. Low-lying gardens and pastures that have been flooded are no longer suitable for planting crops or raising livestock. Repeated flooding also fills the creeks and streams with silt and dirt - further raising the water level. Thousands of dollars each year are spent repairing roads and bridges that are cracked or broken and possibly even washed away altogether. My second grade students will be comparing multiple solutions that they have designed and created to prevent water from changing the shape of the land. Students will be asked to create land models, which may include mountains, rivers, and lakes. These will be actual soil models and rain simulators will be used so that runoff and erosion totals can be measured. They will record their

finding and communicate this data by creating and displaying bar graphs.

Jones, Jonathan

Grades 9-12, Technology STLP
Hazard High School, Hazard
Project Title: Through the Lens



I have seen the need to invest more time in identifying the student's individual needs, primarily building upon their current technological skillsets rather than focusing on the group as a whole, mainly due to varied interests and capabilities. One of the most common interests I have seen over the years is in photography. Through the Lens will give students in grades 09-12 the opportunity to: (1) showcase innovation (2) express independent, as well as group creativity (3) develop entrepreneurial skills and (4) inspire personal confidence and purpose. This approach will create a plan for financial sustainability of the STLP program in addition to exposing the students with much needed newer equipment that we can purchase with the funding acquired via the sale of the STLP produced work and assignments. This educational opportunity will provide an engaging hands-on experience outside the classroom which will prepare students to succeed in the 21st century workforce.

Kennon, Rebecca Susan

Grades 10-12, Intro to Chemistry and Physics
Pikeville High School, Pikeville Independent
Project Title: Building Robots, Building Futures



The *Building Robots, Building Futures* project, gives students in my Introduction to Chemistry and Physics classes the opportunity to experience some of what careers in the engineering and technical fields have to offer. In a personalized learning environment, groups of students will use the LEGO Mindstorms NXT equipment to create robots to perform basic mechanical tasks. These robots will be made of a combination of traditional LEGO pieces and a few other accessories and equipment pieces from other sources. The tasks will be to create aquatic robots. During these activities, students will be presented with five challenges of increasing difficulty. As students strive to meet the challenges, they will work through the engineering design process many times. It is their task to design, build and program robots that will be positively buoyant, and later add a neutrally buoyant component, that will be stable in the water, and that will be able to move forward, backward, left, right and up and down in

the water. One of the most difficult challenges though is that the students have to program the robot so that its actions are so smooth that it can be navigated around obstacles and can be made to perform specific tasks in the water.



APPALACHIAN RENAISSANCE INITIATIVE
Educational Excellence in the Heart of the Mountains

Kincaid, Sarah E.

Grades 9-12, Science
Belfry High School, Pike County
Project Title: Propagating, Planting, and Progress



The classroom, the lecture, and the mundane – all of which have their place and essential aspect to teaching and learning, even in this fast-paced, ever-changing 21st Century in which we live. However, there are also times when learning needs to expand far beyond the walls of a classroom and give students an opportunity to get their hands dirty and think outside the box. Literally, get their hands dirty. Propagating, Planting, and Progress is geared toward expanding the horizons of my senior Biology II and freshman Earth Science classes by utilizing our school's greenhouse as a hands-on laboratory. Students will learn what is meant

by stem propagation (the process by taking cuttings from existing plants and growing new plants without harming the first), nursing and cultivating annual seedlings, creating a product from forced bulbs, and developing a system where these projects can be used in campus landscaping and sold to generate revenue for future science department projects. With the decline of our local economy and the rising global demand for food, educating students on the science and art of agriculture that was once commonplace in our region will reestablish self-sufficient skills of food production and provide an outlet for other economic opportunities in the realm of agri-science. With the students being a part of all aspects, they will become experts, so to speak, and have a vested ownership in the project and be able to educate others how the process works and can be implemented in their own lives.

Kinner, Dawn

Grade 10-12, Yearbook
Paintsville High School, Paintsville Independent
Project Title: A Picture is worth 2015 Words



In order to produce a quality yearbook, the students must first take photographs to be used in the publication. The proposed project is asking for a grant to purchase a new camera that students can use to take pictures and edit through our online program. Students will be taught photo techniques and photocomposition. Students will learn the importance of and demonstrate journalistic principles. Project objectives are:

- Develop the concept of the yearbook
- Understand how a yearbook theme keeps consistency and flow within the yearbook.
- Meet original deadlines and proof deadlines
- Collect payments and keep records of sales & expenses.
- Participate in fundraising activities
- Deliver the yearbook to the staff and students on time

Kinner, Jason

Grades 9-12, Media Class
Paintsville High School, Paintsville Independent
Project Title: Media Matters



Most students are unaware of the available options with a skill set in technology and media. We are trying to bridge that gap by allowing students to explore various methods of media publications. In the PHS Media class, the students will lead a self-guided curriculum in which they create a media project goal and work towards that goal. Many of the projects include, PHS News, commercials and effective advertising methods, skits and short films, as well as film various PHS activities allowing their classmates the ability to reflect on high school memories. Students find media rewarding yet challenging and often a new experience. After completion of the class, students will be able to set a goal, break that goal into smaller tasks and most importantly they will learn project management skills that they will use in any future endeavor

Lawson, Christen and McCreary, Stacey

Grade 4-Social Studies and Science

Rosspoint Elementary, Harlan County

Project Title: CUMBERLAND GAP STATE PARK TRIP



Students will be given a two-hour tour jam packed with content! They will take a trip through Gap Cave and explore rock formations and sediment layers. They will see the historical Hensley Settlement and learn about plants and animals that are native to Kentucky. They will explore hiking trails to the Pinnacle Overlook where they will be able to see three states at once and even stand in two places at once while on the KY\VA border! Students will see exhibit about Daniel Boone and Dr. Thomas Walker and also visit the Abraham Lincoln Library and Museum and have lunch at Gondolier restaurant. Upon return, students will complete a culminating project that integrates the knowledge learned on the trip and uses their prior knowledge of

science and social studies. The project will include a diorama of the student's favorite part of the trip and a narrative writing about the depiction. Students will identify ten facts about the diorama and give an oral presentation.

Little, Tyler

Grades 10-12, Algebra 2 and Advanced Algebra 2

Letcher County Central, Letcher County

Project Title: Mathsketball



During the school year, math class will be held in the gymnasium to see various mathematical concepts from Algebra 2 class come to life. This exploration will be done in conjunction with science teachers to explore the science behind motion and trajectory. Students will be asked to perform normal basketball skills such as shooting, dribbling, and passing while exploring mathematical topics. For example, students will go to the gym during the unit on quadratic functions and explore the relationship between the path of the basketball when it is shot towards the goal and the curve of a parabola. While exploring this topic, students will learn about the forces of motion and the physics behind the trajectory of the basketball in their science classes. By the end of the unit, students will be able to describe the basketball shot in a way that relates to both mathematics and science. The ability to perform such math problems is due to sensors inside of the basketball, which tracks the flight and vital statistics of the balls

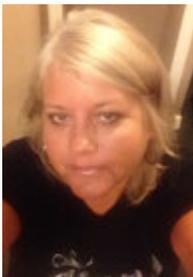
movement. This information is displayed on the included tablet for students to easily view and interpret.

Lucas, Deborah

Kindergarten, All Content

Cordia Elementary, Knott County

Project Title: STEM Building using Lego Bricks



Lego bricks have long been beneficial in promoting fine motor development in children. However, there are many more benefits to implementing Lego use in the classroom. Lego brick free building affords children the opportunity to plan, design and create three-dimensional structures. Lego bricks simple machines building encourages children to examine how simple machines work as well as how to construct these figures. My proposal is to include Kindergarten students in an after school program that will enhance these skills. The after school program will be offered one hour per week, where students will be encouraged to follow written diagrams to complete three dimensional projects. They will also be afforded the opportunities to create their own projects independently or within small groups. Completed projects will be displayed throughout the week creating a sense of pride and accomplishment in their

work. Lego brick building has always been thought of as a gender specific activity, however, with new Lego sets available, gender specificity is a thing of the past. New Lego sets offer more diversity in interest, thus there is something for everyone!



APPALACHIAN RENAISSANCE INITIATIVE

Educational Excellence in the Heart of the Mountains

Matney, Deborah

Grade 3, ELA, Math, Science, and Social Studies

Porter Elementary, Johnson County

Project Title: Improving Student Skills Using Technology



The objective of this project is to provide a current technology in which students can create movies, cartoons or power points to display their knowledge of math and reading skills. Since math and reading are enduring skills that will last a child a lifetime, it is important that every single child receives the very best instruction possible every single day that they are in my classroom! “Best Practice” research has proven that a child learns a great deal more when, after learning a skill, teaches that skill to others. With the use of the Mac Book, I envision my students filming themselves "teaching" a skill they have recently learned. The student will then create a video presentation that will teach a skill. For example, we will begin learn multiplication in the near future. Students will video

themselves teaching two strategies of multiplication. During the next series, the child will teach a reading skill. This assignment will be modified for students or require intervention by assisting them with their scripts and working with them during the video process. On-level students will complete the assignments on their own. Advanced students will complete the assignments, but will also add special effects and music to their videos.

Maynard II, Sammy

Grade 5, Science

Southside Elementary, Pike County

Project Title: Engineering: Innovation for All



My proposed project will focus on robotics and inventions in engineering. Students will determine a relevant problem in our local area-affecting residents with disabilities that could be solved through the incorporation of innovative technology. Then, student-engineering teams will research and design an operational model using the EV3 Lego Mindstorms robotics class sets to address the determined need. Students will record their progress in a “Research and Development” notebook, integrating design schematics, photographs, and anecdotal records of the engineering process. Students will gain first-hand experience in the real-world applications of technology as a tool for innovation. The Lego Mindstorms kits provide students with 21st century critical thinking skills and technological literacy

necessary for students in a global market economy. Students will practice beneficial teamwork skills and positive social interactions.

McCoy, Christy

Grade 3, Practical Real World Reading

Southside Elementary, Pike County

Project Title: Kids get R.E.A.L. with (Research, Exploration, Analysis, and Learning)



Students were concerned with litter, recycling, and the lack of recreational activities in our area. This River Project involves students working in a classroom setting, as well as, a field study live on the banks of The Tug River via an Airboat. Students will test and compare Water Quality Samples in the river to that of a creek and pond and record the types of animal life that they support. Knowledge of Ecosystems (Wetlands) will be understood in a real world setting. The innovative use of technology will involve students recording live video on their iPads, of their Virtual Field Trip as they Skype with their Bucket Buddies from another country or part of the U.S. Students will explain Phase 2 of this project, via E-Books, which involves Tire Clean-Up in our waterways and their Plan of Action to use Economics (Interdependence) and Math to Dispose of and Recycle the Tires into Rubber Mulch for

our School Playground. Phase 3, will come to fruition as our business partnerships, within the Tug Valley Region, work together with my S.T.A.R.S group to promote recreation and wellness for local families. The students will design fishing docks, purchase kayaks, and paddleboats to put along the Tug River. Eventually, this could turn into an outstanding entrepreneurship or profit making business (Anything That Floats, LLC) to promote tourism in our area. Who knew our river ran rapid with resources?

McCune, Cathy

Grade 10, Biology Teacher

Breathitt High School,

Project Title: E-Beam Interactive Instruction



The E-Beam software application will allow us to transform a simple piece of whiteboard material into an interactive workstation for my students. The white board will be secured on a square table beneath a projector in our Next Generation Classroom. The E-Beam will be mounted in one of the corners of the whiteboard making it, once calibrated, an interactive piece of equipment. Students working individually or in groups will be able to conduct research, conduct virtual labs, observe videos, or create their own documents and presentations. It will allow students to work in a unique way in a group setting.

Minix, Elizabeth

Grades 2-6, Hearing Impaired

LDJ Elementary, Breathitt County

Project Title: iTeach



As an itinerant deaf and hard of hearing teacher, my vision is to establish a distance-learning environment for my students when I am traveling to different schools in the district. I would also like to create a virtual pen pal system with other deaf and hard of hearing students in other districts. This would allow my students to communicate with other students with a similar hearing loss. This environment and system will provide a more engaging atmosphere with the classroom and allow students to achieve a greater success in proficiency within English and technology standards.

Mobley, Angel

Grades 9-12, Speech/English

Knott Central, Knott County

Project Title: Speak the Speech, I Pray You



Students from across the county participate in elementary speech in hopes of one day becoming a member of the elite KCCHS Speech team. This grant will give our team an additional opportunity to compete at an intense level. Additional competitions will better prepare our students for the spring state tournament held each year at the University of Kentucky. Last year, we had a state champion. We look forward to this year providing this same level of exceptional performance. At the high school level, there are currently thirteen categories for students to compete: broadcasting, declamation, dramatic duo, dramatic interpretation, humorous interpretation, poetry, prose, impromptu, extemporaneous, improv duo, poi, storytelling, and oratory. Not only do students compete at high levels, but also students dress in formal work attire to compete. The grant award will also improve our school's program review score by helping to meet standards in the arts. These students are performers in every sense of the word. They are providing performances to be enjoyed every weekend that we travel and represent our school. These students are dedicated to the success of their team, and this grant will only help them to improve.



APPALACHIAN RENAISSANCE INITIATIVE
Educational Excellence in the Heart of the Mountains

Montano, Maria

Grades 10-12, Spanish

Breathitt County High

Project Title: Let's Dance to the Beat of Cultural Amalgamation 2



Spanish students will have an opportunity to investigate different cultures and discover that cultures relate and influence each other. Students will witness this mixture via music and dance by watching a live show - "Latin American Carnival". In addition, students will participate in the interactive portion of the show where they will dance on stage with the artists.

Prior to the trip, the students will perform an on-line research about the amalgamation of cultures and how this fusion is reflected in their music and dance. After the trip, students will create a power point presentation that shows their understanding of cultural mixture; students will present their work to schoolmates and record it on the Holler to share with others in the region.

Moore, Stephanie

Grades 7th and 8th, Technology/Communications

Johnson Central Middle School, Johnson County

Project Title: 21st Century Communications



The project will be a community service project, in which students will create care packages for new parents that will be distributed to local hospitals before they leave with their new baby. The package will include an informational letter, created by the students, which will explain to new parents the importance of reading to children at an early age. Students will research the content presented within this writing. In addition, the package will include a baby book and DVD Movie of the book that is created by my students. Students will create a Glogster and later create a specific board book and iMovie for students to watch and follow along with while reading the book. Throughout this project, I

will be teaching the proper way to do research. I will video the proper steps to use when doing research in order to personalize the learning. During the project, every lesson will be recorded. The use of the Mondo pad, the Swivl, the video camera, and the touch tablet will be sources I will utilize to record myself during class, after school, and to help me edit my videos for finalization. This will help me prepare a digital library of lessons for an entire nine-week period that I can upload to "The Holler". Teachers from other districts can also use my lessons with their students.

Mullins, Stephanie

Grade Kindergarten

Southside Elementary, Pike County

Project Title: We All Have Needs!



Our project will begin with discussion of living and non-living things to establish that even though plants do not move they are living and all living things have needs. Following this the students will be introduced to seeds that will be placed in special see through containers so students can observe and record the changes that take place daily. Our classroom will contain a mini-greenhouse and a plant lab to help start the germination process of both flower and vegetable plants during the early spring months. During the early stages of plant growth we will use the Wisconsin Fast Plants to start our classroom butterfly habitat. Once the green house and plant lab plants are ready to be planted the students will cultivate the pre-existing garden boxes located at the back of the school. Students will also be given their own Eco Plant Pal to journal and record changes into development. Throughout our project we will be conducting experiments such as comparing plants grown with and without sunlight, water and soil to

discover the basic needs for plant growth. Students will be exposed to plant related literature during reading and basic data collection including measurement and writing during journaling. Our class along with the other Kindergarten classrooms will be exposed to a variety of animal habitats to further strengthen the interdependent relationship among plants, animals, and humans.

Murphy, Karen

Grades 7-12-Library

Pikeville High School, Pikeville Independent

Project Title: Ninja Reader Leaders



During the 2014-2015 school year members of the Pikeville High School Library Advisory Council and the Breakfast Club will explore eBooks, using Overdrive eBook service. These students will be trained to share their knowledge of eBooks with other students during class in collaboration with participating classroom teachers. The Overdrive app will enable students to download and read books on their phones and tablets. This program will allow us to personalize student reading, and to work progressively toward meeting Reading Standards for Literature. Our goal is to develop as many readers as possible, but with stealth. We want to share our love of reading, and although reading is a solitary activity, few individuals are more passionate than an avid reader when talking about their favorite author or book, and students are more excited about reading books suggested by their friends than by their teacher

Napier, Carol

Grades 3-5, Math

Southside Elementary, Lee County

Project Title: Integrating Hands On Activities



This project will involve 3rd through 5th grade students and Math teachers at our Elementary. My projects purpose is to integrate hands-on activities during Math instruction. Math teachers will use the purchased Mango Math: Deluxe Math Crates to engage students in learning, so that students are meeting the Common Core and NCTM standards for Mathematics. The ARI teacher leader will train 3rd-5th grade math teachers on the project and how to integrate these materials and assist them as needed. Each grade level will complete at least 80% of the activities from the Math Deluxe Crates. These activities will require students to think critically about math, and help them master the Common Core and NCTM standards. Teachers will use these activities while teaching specific units that align to the Common Core standards.

Napier II, Charles David

Grades 7 & 8 Mathematics

Sebastian Middle School, Breathitt

Project Title: Students Constructing and Programing Robots



Students will use Lynx motion Robotics kits to solve real-life problems. They will engage in STEM learning as they:

- Design and prepare blueprints for a programmable robot
- Build their robot
- Program their robot to complete a useful real-world task
- Document their process in an Engineering Journal

This project will directly relate to Kentucky Common Core Mathematics Practices and will also integrate the engineering standards from the upcoming Common Core Science.



APPALACHIAN RENAISSANCE INITIATIVE
Educational Excellence in the Heart of the Mountains

Ousley, Leslie

Grades K-5 Positive Instructional Support
Prestonsburg Elementary, Floyd County
Project Title: Blackcats “On the Prowl” Internet Café



Prestonsburg Elementary will develop an “On the Prowl” Internet café in the lunchroom. A variety of content delivery sessions including academic remediation and acceleration will be available to students before, during, and after school. Social – media guidance, prevention programs, staff professional growth, co-teaching, and parent outreach will be a part of the transformation. 21st century learning and digital conversion will be present via large screen Smart TV and Dell laptop technology station. This will create an additional learning environment and provide greater opportunities to actively engage all (727) students.

Penix, Holly

Grade 5, Reading, LA, Spelling, Social Studies; Grade 6, Reading, LA
Red River Valley Elementary, Wolfe County
Project Title: Facilitating Project Based Learning Through the Use of Technology



Technological advances are being made on a daily basis, making it difficult for teachers to keep up with these advances in the classroom. Diminishing school budgets have left schools struggling to incorporate current technology into classroom instruction and prepare students for the constant advances made in education technology. This grant has provided me with the resources needed to do that. Funding from this grant has provided my students with four iPad minis and Otter Boxes and will allow me to facilitate technology-based project based learning initiatives in my classroom. My students will utilize a variety of applications to locate information; design and produce projects; collect, interpret, and present data in visual form; compose written arrangements and visual presentations; and formulate musical arrangements in ways that they have never had access to. As a result, my students will leave my classroom prepared for the challenges and changes in technology that are coming in the near future and will be able to apply their knowledge in ways they had never imagined.

Preece, Kelly

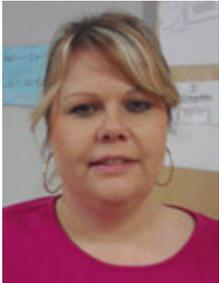
Grade 1, Science
Southside Elementary, Pike County
Project Title: Planting the Seeds of Knowledge



First grade students will develop a deeper understanding of life science through the study of plants. The students will use various tools and participate in a variety of activities that encourage them to make observations and solve problems concerning natural phenomena. The students will examine the parts of a plant and compose explanations about a plants growth and survival. They will also use a greenhouse to alter the normal growing environment of a plant in order to observe and understand the necessities plants need to grow. Through investigations they will formulate answers to questions and draw conclusions about the structure and function of a plant. Students will conduct various experiments to develop an understanding of plants and how plant parts are consumed by humans. After observing and experimenting students will then use their knowledge to grow and take care of their own plant. At the conclusion of the unit the students will be given various materials that will encourage them to problem solve in order to compose a freestanding plant.

Ramsey, Sandra

Grade 8, Cross Content
Middlesboro Middle School
Project Title: Hiker's Lab



I plan on doing the Hiker's Lab from a National Math and Science Initiative training. The objective is to recreate graphs using the variables time and distance. I will be completing this lab with 105 students including 5 FMD students. This lab will increase the knowledge of speed as well as inquiry skills such as problem solving, graphing, and the use of technology. Vernier Lab Quests and motion detectors will be needed. The technology used in this lab will be sustainable and can and will be utilized for many other NMSI, Pimser, and STEM labs. This lab was chosen because it directly correlates with the new NGSS (OB-PS3-1) and because physical science was one of the lowest scores on KPREP in our school last year. This lab will also give an added opportunity to implement and work on the four 21st Century skills. This activity is also cross-curricular with math and language arts, having graphing and writing involved respectively. I would love to network with other educators to share my experience on completion of this project. Our kids currently lack the technological experiences needed for the century. Thanks you for the opportunity to provide this educational and exciting experience for my kids!

Roark, Melissa

Grades 6-8, Mathematics
Jackson City Schools
Project Title: Math Your Way



Students will create lessons, blogs, or station activities. These creations will be videoed and uploaded to the web to help teach other students who may need assistance or examples of problems they may see in their classrooms. Example: Students in 6th grade will learn to plot points on the coordinate plane. Students may use other applications such as Educreate, which includes a graph screen. Students can teach others a step-by-step approach to learning how to plot points. Students who create a blog can interact with others to answer questions relating to the topic. Students will be grouped to begin their projects. Students will work on their projects and become masters in that area to teach others the concept. Students may use computers, I-pads, projectors or any other form of technology to enhance their project. By completing this project, students will become more confident in the area they are teaching as well as being able to view the other creations for help.

Rogers, Katricia

Grade 12, Math
Cordia High School, Knott County
Project Title: Who Really Uses Math



Students will research different jobs and careers and choose three to explore more fully. They will interview professionals in those fields. Once the research is complete the students will make a video. They must describe what they learned, what they liked and disliked about the profession in a summary at the end of the video. The video will also include the interview. Students will learn why math is important and how math is used in everyday life. Students will graph what their retirement would be in x number of years. Students will add sound effects, props, etc. to make the video interesting and creative. Lastly students will present their video to the class. So now students will be exposed to 30 different jobs and professionals. Students will be provided with worksheets and rubric at the beginning of project. Students will be graded after each step. They will use the rubric and grade their own work then I will grade it. We will discuss any differences one on one conference.



APPALACHIAN RENAISSANCE INITIATIVE

Educational Excellence in the Heart of the Mountains

Roll, Maggie

Grades 5-12, Spanish I, II, III

Hazard High School

Project Title: Building 21st Century Skills and Proficiency in Spanish classes



I will integrate technology into my school system's Spanish curriculum, and use proficiency-based measures and performance assessments with more than 300 students across 8 grade levels. I am in the process of creating one new lesson or mini unit for each of my classes that incorporates 21st century skills and performance-based assessment. As a result of these new lessons, my students will demonstrate increased proficiency in the linguistic and cultural competencies outlined in the Kentucky Standards for World Language Proficiency. The starting point for this project was my participation in the 3 day Kentucky World Language Association conference. In addition to networking with colleagues from across the state, I attended workshops about Integrated Performance Assessments and how to evaluate use of 21st century skills in lesson planning. I also took advantage

of sessions about the new World Language Program Review and "Proficiency and Backwards Design". After attending the conference, I have a better understanding of what an ideal Spanish curriculum should look like and many ideas for my new units and how to be a resource for World Language Review.

Salyer, Lisa

Grade 3, All Content

Highland Elementary, Johnson County

Project Title: Leadership and Character in the Digital Age



This "Leadership and Character Education in the Digital Age" project was designed to allow for collaboration between colleagues, provide a source of instructional tools, create 24/7 access for instructors and students, and allow students to learn through a wealth of educational tools. The course was created using iTunes U. The iTunes U app puts all the materials in one place. Within the app any user can play video, read books, listen to lectures, and watch presentations. Course assignments can be viewed and checked off upon completion. New posts notifications are also sent out to all enrolled users. Enrollment requests can be sent out to students and colleagues. Additionally, the course manager may invite Course Contributors to add materials, posts and enrollment request. Enrolling in this link will allow access to instructional materials to be used during the project. Students who are absent or need to review the material will be able to access the resources as needed. An iTunes U and

Glogster EDU support class will be held after school for all interested students and parents. Students will view various instructional podcasts, links, read/listen to stories, role-play, create glogs (digital posters), and record digital oral presentations which will be used as an evaluation piece. Student generated instructional glogs will be placed in a digital portfolio and located on the third grade 21st century webpage titled 7 Habits student glog.

<http://highland2011.edu.glogster.com/glog-8588-2840/>

iTunes U enrollment link: <https://itunesu.itunes.apple.com/enroll/FPY-5LB-HC4>

Salyers, Casey

Grade 5-Math

WR Castle, Johnson County

Project: Enhancing Learning With iPads



Personalized instruction is a must in order to successfully meet the Kentucky Core Academic Standards in mathematics. Individualized instruction is especially needed when the students are outside of the classroom. By using iPads and the Mondo Pad a "24 hour" teacher can be created for the students to use as a resource while they are in and out of the classroom. With just a few taps on the screen and a couple of minutes, the teacher can create individualized lessons in the form of a video that students can view. All individualized lessons created can be linked as a QR code. Students can use a QR reader to retrieve lessons on the classroom iPad or on their own smart device anytime and anywhere, therefore creating a 24-hour teacher at their fingertips! This grant will not only positively impact the students during this school year, but will impact students for years to come and from around the world.

Sanders, Emely

Grade 1, All Content

Jenkins Elementary School, Jenkins Independent

Project Title: Sweet Tweets



Researching/pondering “Sweet” will open up a literal “world” of opportunity for my little learner’s creativity. Students will collect research in “SWEET” notebooks as they learn about candy making; marketing and other economic terms from expert guest speakers and field trips; and, creating a classroom twitter account (with parental guidance/permission) where students tweet about their learning throughout the project. Students will create their own “candy recipes” and make candy in class. Students will use their marketing skills to make commercials/videos that will be available for entire school viewing. Students will then turn our classroom into a “Candy-Shop” to sell their sweet creations to fellow classmates. We will encourage other students from our school to tweet about their thoughts and ideas pertaining to our questions. Model cafeterias and playgrounds will be created via play dough and pipe cleaners. Performance-based learning will be taking place as my class invites community members to be a part of their dreams and visions for our school.

Sanger, Melissa

Grade 1, Science and Reading

Southside Elementary, Pike County

Project Title: Nature’s Copycat: Observing and Mimicking the World We Live In



First grade students will observe the life cycles and habitats of butterflies, frogs, ants, and chickens. During the weeks of maturity the students will be recording the daily transformations of the animals. Once butterflies and frogs are at full maturity the students will record how the habitat of these animals has now slightly changed due to new adaptations. Then students will use on level books and Internet sites to conduct research on other animals. During the research process the students will be recording findings of interesting adaptations of animals in their habitats. Finally, students will use the information they have learned to create a bio-mimicry project. The students will create a mystery box. This mystery box includes a note to a friend that they only want the friend to see. Consequently, the students will use adaptations from the animals they studied such as camouflage, sharp teeth, poison, smell, prickles, etc. to decorate their box to protect it from anyone wanting to take a look inside.

Scott, Edie Michelle

Grade 7, Math

Pikeville High School

Project Title: Personalized Learning: Trend or Triumph



The current research on personalized learning via technology and stations is limited therefore I am conducting my own action research in my classroom. For the technology portion I am using Khan Academy to target gaps and advance students forward as well as keep track of their A normal day in my classroom will look something like this: The class will be five to six groups depending on the class size of about four students per group. One group will be working on Khan Academy. One group will be with me receiving small group instruction to help address misconceptions or learn new content. The other four groups are working on something personalized to their needs based on a prior formative assessment. I will follow the Personalized Learning format. I will be collecting data throughout the statistics unit from multiple sources. Also, I will be interviewing students to get insight into what the students like or dislike and how they feel about the stations in comparison to whole group instruction. I will present my action research findings to my colleagues and post on the Holler.



APPALACHIAN RENAISSANCE INITIATIVE
Educational Excellence in the Heart of the Mountains

Sexton, Debra

Grade 8 Language Arts
Whitesburg Middle School, Letcher County
Project Title: The Giver



In this project, all the eighth graders who attend my school will examine our own “community” after having read about the Community in the novel *The Giver* by Lois Lowry. We will research via the Internet, personal interviews, walking, field trips, newspapers, and/or other available means to find out the make-up of our area, how we function, why we function the way that we do, and who determines what happens in our area and how that determination is made. We will find our own Treasured Memories as we examine those of the people around us. Students will compare/contrast their own community to the Community Lois Lowry created in the novel *The Giver*. Students will be hooked on finding other treasures in more novels by the author that explores the same common theme and thus we will continue to read and study those. In the end, students or student groups will make an audio-visual presentation that compares their own community to the Community Lois Lowry created.

Smith, Debra

Grade 4, Science/LA
Southside Elementary, Pike County
Project Title: High Tunnel



I felt the need for students in our area to learn how to raise a garden. This unit was developed so that students will learn the planting of seeds, cultivating the garden, the harvesting, and to the selling of products that are produced. After many discussions as to world hunger students will attempt to solve the problem of how to grow plants all year long in a High Tunnel, once they have learned what a High Tunnel is and the benefits of one. After much thought this unit will be an on-going process that will last the whole year and be benefited by all of our students in our building that house grades 1-5. However, an in depth four-week unit on plants is planned for my eighty-two 4th graders where I the teacher plan to use many hands-on experiments, different reading strategies while reading books and doing Internet research. Students will learn the basics of plants such as: the importance of plants, the nutritional value of eating healthy, what’s inside seeds, plant basic parts and their function, how plants reproduce, plant life cycles, photosynthesis, respiration, and the medicinal uses of plants.

Smith, Jerry

Grades 9-12, Technology
Breathitt County Tech Center
Project: Weaving a Web for Student Success: Real-World Web Design for the 21st Century



This project is focused on teaching first-year web design students how to do requirements gathering as well as how to conduct business virtually. Teams of students will design a simple 3-4 page website for a real small business in Eastern KY. Potential clients will be found through newspaper ads and social networking. Rather than face-to-face meetings, the teams will meet with their clients through Skype or FaceTime. Through a sequence of three meetings, the teams will incrementally refine the site to the clients’ specifications, going from sketch to final design in the process. Each student will be assessed by their meeting notes and mockups. The entire team will be assessed by the final website and a final report that provides insight into design decisions and details any issues the team may have faced during the design. The project will conclude at a reveal night hosted at the ATC, where the teams, their clients, parents, and members of the community will come together to see the final products.

Stamper, Sheila

Grades 9-12 Yearbook Journalism
Knott County Central High School, Knott County
Project Title: Yearbook Journalism



With this grant, my students will have access to a camera and scanner. They will be exposed to a photography unit in class. They will analyze their photographs to improve their skills as a photographer. With the scanner students will continue to refine the technology skills. Objectives will definitely be met once the students create pictures that are published in the 2015 Centralian. Students will attend academic and athletic activities to take pictures and create a visual history of the school year. Students will also capture daily activities during the school day at Knott Central. They will also be able to scan pictures and information into the computer.

Staton, Kendra

Grade 1, All Content
Southside Elementary, Pike County
Project Title: Wondrous Waves: A Study of Sound and Light



Through the implementation of first grade Next Generation Physical Science Standards, students will participate in collaborative, interdisciplinary, relevant investigations relating to both light as well as sound. This includes developing an understanding of the way in which light and sound travel. Additionally, students will conduct numerous investigations that allow them to determine the effect of different variables on sound and light. It will provide them with an opportunity to utilize tools in the design as well as construction of light and sound devices for the purpose of communication. A culminating project will center on the first grade students applying engineering skills to design and build solar lamps from recycled materials. These lamps will then be utilized on the school's premises as pathway markers, allowing students to discover a self-sufficient light source. This project also serves to demonstrate to the community that first grade students possess the twenty first century skills necessary for creating unique solutions to modern day problems in a cost effective, earth friendly fashion.

Stephens, Ben

Grades 9-12, Sign Language
Johnson Central High School, Johnson County
Project Title: ASL Online



This project will take place within a classroom with computer and Internet access. It could be accessed at home by those who have the capabilities. Many, if not all of the assignments could also be completed with many of the smart phones that are currently on the market. I've been informed of the recently created on line classroom called "The Holler" and think this would be the perfect vehicle for the students to use in order to receive teaching and assignments as well as submit their work and ask questions. It would also be good practice for many students who are going to college as they would like to have to use some sort of program akin to "Blackboard" depending upon whichever college they attend. The students would have multiple assessments and projects to complete throughout the year in this course. Students will be presenting individual and group projects by way of video, emailing papers and journal entries and submitting tests by way of video or through "The Holler" online classroom.



APPALACHIAN RENAISSANCE INITIATIVE
Educational Excellence in the Heart of the Mountains

Stewart, Sherrie

Grades 9-12, Agriculture
Breathitt High, Breathitt County
Project Title: Country Ham House



Project 1:

Students will develop hands on skill, and develop ownership and pride in a completed useful project. The completion and repairs of the “Ham House” will allow for future continued projects for students learning how to cure country ham. This project gives students attainable goals to complete a project and one they can reflect on and have ownership in. Students will develop a bill of materials, plan of action, timelines, apply safety procedures, collaboratively work within departments, make practical application, and give something back to the school that other students will benefit from. This activity will allow the students to have a project that their children one day can also take part in.

Project Title: KY Proud Project

Project 2: Students will harvest locally grown fruit, Asian pears, apples, strawberries, and grapes and process them to create jellies and jams will be marketed as a “KY Proud Product”. Students will learn about plant varieties, yields, production, growth, care and management of the fruit. Students will be involved in the harvesting of the fruit and preparation for canning. Students will use safety procedures in the canning process, while working with UK specialist in the proper canning procedures. Students will learn the process of which to apply to the KDA and develop a recipe, design a label for their product, promote their product as an educational experiment using technology, such as face book or Edmodo, and evaluate their product when completed

Stidham, Effie

Grade 11, US History/English I, II, III
Hazard High School
Project Title: Effie’s Eclectic Express



I chose the title, "Effie's Eclectic Express" because I am requesting funds for resources to use in 2 content areas: my U.S. History and English classes---hence “Eclectic”. “Express” is meant to convey a **learning train**, which is what I strive for my classes to be---fast and fun, headed straight for a destination: learning. We live in a world full of **technology** that **advances** on an almost minutely basis. In order for our students to be **college and career ready** we, as educators, must **utilize** this **technology** in our classrooms and teach our students to be **technologically savvy capable of using technology as well**. Each of the last 3 years I have had incorporation of technology in my classrooms as a goal in my Professional Growth Plan.

Tackett, Alice

Grade 2, LA (Reading and Writing)
Southside Elementary, Pike County
Project Title: Restoring the Majestic American Chestnut



My students will work with others, seeking to make a difference in their community by devising an authentic, real-world plan to restore natural balance to the forests of eastern Kentucky. They will explore the biological, social and economic impact that occurs when vital natural resources are lost. Experiments and hands-on activities will be conducted to explain why trees are necessary for survival of wildlife and human beings, while discovering how human impact renews or destroys our forests. Through community partners, such as the local conservation officer, a Kentucky Department of Fish and Wildlife ranger, and a representative from Robinson Forest, students will formulate a plan of action to restore blight resistant American Chestnut Trees to the forests of Eastern Kentucky. In order to provide opportunities for innovative learning, this project will utilize technology by having students keep a personal science journal electronically as they explore the interdependent relationships between plants and animals in their environment. They will look at endangered plants and animal species of the Appalachian Mountains and search for reasons why they are struggling to survive. Through observation and experimentation, students will describe what plants need to survive. They will discover how diseases can cut off nutrients and water, gradually killing the trees. Then students will construct an argument, supported by evidence for how plants can change when the environmental factors fail to meet basic needs for survival. The students will create a model to represent the relationship between the needs of different plants and the places they live. The class will communicate solutions that will reduce the impact of humans on living things and formulate a plan of action to replenish endangered plants in the local environment.

Tackett, Angie

Grade 2-Reading, LA, Math and Science
Southside Elementary, Pike County
Project Title: "Marvelous Matter"



This project is a three –four week unit of study on the world of matter. While my students are involved in these 21st century activities, they will develop skills that enable them to perform in problem-solving groups that are both engaging and enriching. Each task is a “hands-on” real-world task that will allow the more abstract concepts to appear more concrete. My second graders will learn that everything in the world is composed of matter or energy. They will learn that matter is important because it makes up everything around us; matter cannot be created or destroyed it just transforms into a different form. As they work through this inquiry-based unit, they will find that matter has two essential properties, mass and volume. These properties can be affected by many variables. My students will also learn that matter can change its form, but in its element form matter cannot be destroyed. During this unit, I will incorporate Science, Language Arts, Math, Arts and Humanities, and technology to address the many learning styles that I have in my classroom. Each activity will address these learning styles in an effort to keep each child actively engaged.

Tackett, Traci

Grades K-12, Gifted-All Content
Pikeville Elementary and Pikeville High School
Project Title: Plant it for the Planet



Our district collaborated with Dr. Cathy Rehmeier; a professor at The University of Pikeville, to execute individualized learning projects through the garden initiative. The High School Class even won a National Level Award based on their work with the garden. Our desire is to expand the project further. The Gifted teacher works with all students at all grade levels. This allows student and teacher collaboration through interdisciplinary methods. Mentors from the community will work with our junior High students who in turn mentor the younger Elementary Students. Dr. Rehmeier is a highly respected Gardner and blogger. Our goal is to implement a ‘School Wide Garden’ that is managed by the GT students and enjoyed by all. Teachers from the region will benefit from the shared learning that will take place at the summit meetings and the technology postings via “The Holler”.



APPALACHIAN RENAISSANCE INITIATIVE
Educational Excellence in the Heart of the Mountains

Taylor-Rowe, LaTonya

Grade 4- Math

Highland Elementary, Johnson County

Project: Q and R Codes in Education



You see them everywhere these days: on the back of your favorite cereal box, on manuals, even on your store receipts. But what are QR codes and how can these little black squares be used by my students? QR codes, or Quick Response Codes, are two-dimensional barcodes generated by my students to enhance individual school projects, assist with homework assignments, and give detailed directions for classroom assignments. QR codes are also, helpful to parents when explaining new concepts to their child in a home setting. Students utilize an iPad to read QR codes as needed to complete classroom assignments. Students also use the iPad to view student projects on display in the hallway or classroom. I am eager to see how creative my students become with QR codes!

Thompson, Beth and Koutoulas, Steve

Grades 9-12, Science

Wolfe County High School, Wolfe County

Title Of Project: The Chemistry – Car Connection



The Chemistry – Car Connection is a collaborative effort between Mrs. Thompson's chemistry students and Mr. Koutoulas' technology students. These classrooms will combine to investigate the numerous ways in which cars are connected to chemistry. The project will begin with the formation of cooperative groups of students who will then conduct computer research to label a car diagram with all of the chemical compounds and mixtures, including fluids, which make up a car. Students will also find and record at least two chemical reactions involved in the car's operation. We will then conduct lab exercises in which we will test some of the physical and chemical properties of several car fluids. The second phase of the project will focus on reactions that power cars. In today's environmentally conscience society, however, there is

much attention on alternatively powered vehicles. Students will then collect cooking oil from our cafeteria and then filter that oil with a device they will construct themselves. Finally, students will design and construct plastic bottle cars, which are fueled by a double displacement reaction. Students will use guidelines established by the American Society of Chemical Engineers to race their cars and determine the best reaction process.

Thompson, Joanna

Grades 5-12, Visual Arts Classes

Hazard Middle School

Project Title: Mural and Mosaic Gardens



Hazard High/Middle School's project will be called the "Mural and Mosaic Gardens." The students will have the greatest impact with this project by designing and developing skills to create murals as well as mosaics. This project will invite the community, media, and sponsors to see the vision and creativity through the student's eyes. The outdoor classrooms will be the focus for the mural and mosaics. This artistic work will help to enhance the quality of the outdoor classroom and give the students and faculty a new appreciation for the fine arts. That appreciation will travel to projects that will affect downtown Hazard. Every student has a voice but until we enable the student body: their voice will never be heard.

Varney, Shelia

Grade Kindergarten, All Content
Southside Elementary, Pike County
Project Title: Do We Really Need One Another



Students will be immersed in hands on activities highlighted by iPad technology. Several of the activities use various resources including Teaching STEM in the Early Years, Engineer Through the Year (K-2). Project Learning Tree and Project Wild. I am fortunate to have two other colleagues that will be doing similar but different activities. Technology will be embedded through the unit. Along with these hands on activities the students will also be using QR codes and apps for animal/plant videos and demonstrations. Recording sheets will be used to enhance videos/app participation. We will use the iPads to take pictures of the changing environment as the new school is being built. Also, the Smartboard will be utilized for whole group lessons.

Webb, Christy

Kindergarten, All Content
Southside Elementary, Pike County
Project Title: Earthworms, and Chicken, and Ants! Oh, My!



Students will observe actual butterflies, ants, chickens, worms, mealworms, and frogs transforming and living in our classroom. Students will plant their own plants and conduct experiments on how plant growth is affected when the variables of water and sunlight are applied to their growth then graph their data on simple data tables. Students will use a stream table to observe how streams are formed and how animals (including humans) can engineer solutions that interrupt or increase the flow of the water by building their own “dams” using homemade water tables (made from plastic bins).

Williams, Patricia

Grades 7 and 8, Math, Reading, practical living Skills, Daily Living Skills
Sebastian Middle School, Breathitt County
Project Title: Learning Made Fund Through I-Pads



With the simple touch of an iPad, a hungry non-verbal student can communicate exactly what he/she would like to eat, etc. Students who have augmentative board for communication feel as they are singled out but with an iPad they can use it as a means of communication and “fit into the mainstream”. Another option is Assistive chat, which predicts several completion options. For most severely/profound student Yes/No is a simple app that allow students to voice their preference in Yes/No response. The iPad can e used with students lacking in gross motor skills. Also, behaviors can be monitored and recorded using the iPad. Technology use has become a vital component of all aspects of life. For students to become contributing citizens, they must receive an education that incorporates technology literacy.



APPALACHIAN RENAISSANCE INITIATIVE
Educational Excellence in the Heart of the Mountains

Wright, Cathy

Grade 1, Science and Language Arts
Paintsville Elementary, Paintsville Independent
Project Title: Pumpkin Patch Fun



The students will be going on a field trip to visit a pumpkin patch/farm. The students will get to see the stages of the pumpkin as it grows. They will also get to see and feed many farm animals. I will be taking several pictures of the students during the field trip. The students will use the pictures in their first grade scrapbooks and writing journals. The students will demonstrate the understanding of the organization and basic features of print. The students will also be using these pictures in science as they illustrate the life cycle of the pumpkin. I will be using the grant to purchase a digital camera with accessories, film developing, scrapbooking materials and bus expenses.

Yount, James

Grades 7-12, Instrumental Music
Jackson City Schools
Project Title: Technology Assisted Rhythm



Taking modern music performance for percussionists and guitarist have, up to now, been limited to learning by ear, listening to recordings, or utilizing tablature in place of music notation. Recently programs such as “Rocksmith”, “Rock Band”, and ‘Guitar Hero”, have introduced a new generation to the concept of actually playing musical instruments in an interactive and ‘real-time” process that not only generates and keeps the students’ interest, but also allow the student to learn music, relative to their interests that they can actually perform individually or with the high school band. The project will utilize a modern gaming platform with the “Rock band” and “ Rocksmith” programs for the drum set and guitar, to teach music reading and music performance that will be applicable to the high school band. Both instruments require much one on one time between the instructor and the student, and rely heavily on guess work to pick up the individual parts by ear; while neglecting the process required to learn to read music and in turn learn independence as a learner and musician.

Appalachian Renaissance Leadership Declaration

Leader \li:der\n.: *Anyone who holds her- or himself accountable for finding potential in people or resources.*

To the students, teachers, and principals. To the politicians, community leaders, and decision makers. To neighbors, partners, and colleagues.

To all of us, from all of us:

We will show up, we will learn, and we will inspire.

We are hardwired for connection, curiosity, and engagement.

We crave purpose, and we have a deep desire to create and contribute.

We will take risks, embrace our vulnerabilities, and be courageous.

We understand that when learning and work are dehumanized – when people are no longer seen and daring is no longer encouraged, or when only what we produce or how we perform are valued – we disengage and turn away from the very things the world needs from all of us: our talent, our ideas, and our passion.

There are examples of excellence all around us. We will celebrate and expand these exemplars so that all of us together achieve our potential to serve our region's learners.

We believe that feedback is a function of respect; we will have honest conversations about our strengths and our opportunities for growth and we will celebrate our contributions and commitment.

Engage with us in this work, learn with us, and...

Dare Greatly.



Today's Promising Practices Summit is being live streamed and will be archived and available at www.theholler.org



Action Research Summit: April 21, 2014
East Kentucky Expo Center
Pikeville, Kentucky



<http://goo.gl/dFJgCx>