



ISFIRE 2018



International Symposium for Innovation in Rural Education

A photograph of a long, straight dirt road stretching into the distance through a vast, green rural landscape under a blue sky with scattered clouds. The road is flanked by green fields and utility poles.

Communities and Partnerships: Strengthening Rural Education

August 1-3, 2018

on the campus of Montana State University
Bozeman, Montana

hosted by

Center for Research
on Rural Education
Montana State University
MONTANA

SiMERR
National Research Centre
University of New England
AUSTRALIA



SiMERR Welcome to ISFIRE 2018 at Montana State University, Bozeman

On behalf of the SiMERR National Research Centre I would like to welcome you to ISFIRE 2018 and thank you for your attendance and support of this conference at the campus of Montana State University in Bozeman, Montana.

The ISFIRE initiative arose from a meeting in 2007 between members of the SiMERR National Research Centre at the University of New England, Australia and the New University for Regional Innovation – Teacher Education Innovation Centre (NURI-TEIC) at Kongju National University, Korea. Despite large differences in country sizes, there were numerous similarities with respect to the challenges facing rural schools in both countries, leading to speculation that similar problems exist in other countries, and then, if so, to the question: How were these issues being addressed?

Finding answers to this question led to a series of International Symposium for Innovation in Rural Education (ISFIRE) conferences. The first was held at the University of New England, Armidale in 2009, this was followed by Kongju National University, Kongju in 2011, University of Western Australia, Perth 2013, and University of Central Queensland, Mackay in 2016.

For me, ISFIRE conferences are a special time for education internationally. They bring together committed academics, teachers and other concerned individuals to reflect on, discuss and reveal new initiatives aimed at: (i) supporting teacher quality in rural, regional and remote areas; and (ii) meeting the learning needs of rural students. It remains a sad fact that students in many/most rural areas continue to be disadvantaged educationally. This is particularly true in Australia, evidenced by significant underperformance of rural students, on National and International Assessments, compared to their metropolitan peers.

I look forward to the input, ideas, discussions and plans that will evolve out of the deliberations of this conference. I believe the problems facing students and teachers in rural areas are complex. However, I also believe that workable, innovative solutions involving different key stakeholders can be found. It will be through the combined expertise of committed, knowledgeable stakeholders, such as those gathered here at ISFIRE in Bozeman, that genuine progress can be made to identify fundamental initiatives that could provide the basis for genuine improvements in the provision of education for rural communities.

May our endeavours at this conference represent a further step forward in helping address these critical issues for the benefit of our rural populations.

John Pegg
Professor and Director,
SiMERR National Research Centre

Greetings and Welcome to Montana State University!

We are so pleased you have been able to join us for this exciting gathering of the **International Symposium for Innovation in Rural Education 2018**.

ISFIRE 2018 offers us a rich opportunity to come together with rural educators and researchers from around the globe to celebrate the importance of rural education, discuss our common challenges, explore how research informs our rural practice, and share innovative solutions to address our collective concerns.

The theme for this year's Symposium, *Communities and Partnerships: Strengthening Rural Education* was chosen specifically to explore the various ways the rural education community is working to:

- Foster Community in Rural Education
- Cultivate Rural Partnerships
- Grow the Rural Teaching Profession
- Explore Innovative Practices in Rural Pedagogy
- Foster Rural Student Success
- Build Capacity for Rural Leadership

The Symposium promises to provide a host of opportunities to exchange ideas and share insights about our work in rural education. Together we will engage with four vibrant keynote sessions, a wide array of exciting breakout parallel presentations, three interactive panel discussions, as well as some lunch hour rural highlights. The Symposium has been carefully designed to provide you with time and space to engage your colleagues in rich conversation, networking, and collaboration.

Over the course of the Symposium, also please be sure to participate in the **ISFIRE 2018 Reflections Video Booth**. Thanks to our colleagues from Montana Public Broadcasting Service (PBS), we will be have a Video Booth set up to capture and share your Symposium thoughts, insights, highlights, and hopes for the future of rural education around the world.

Thank you for sharing your work to strengthen rural education. We hope you have a great Symposium experience!



Jayne Downey, PhD
ISFIRE 2018
Director, Center for Research on Rural Education



Growing ISFIRE Since 2009

The **International Symposium for Innovation in Rural Education (ISFIRE)** began as a collaboration between the SiMERR National Research Centre at the University of New England (Australia) and the School of Education at the Kongju National University (South Korea). The series of ISFIRE symposia emphasise the obligation of the global education community towards influencing policy aimed at delivering equitable and socially just outcomes for rural students. Importantly, ISFIRE offers an international forum for sharing research findings, innovative ideas and evaluated approaches linked to positive, practical action. Each symposium is organised as a collaboration between SiMERR and the hosting university.

The first symposium, [ISFIRE 2009 Innovation for Equity in Rural Education](#) was held in February 2009 at the University of New England, Armidale, Australia. This collaboration with the Kongju National University (South Korea) included keynote speakers from Norway, Australia, South Korea, United States of America (USA), and Canada. Papers were reviewed by an international scientific committee and published in the symposium proceedings.

The second symposium, [ISFIRE 2011 New Directions for Educational Welfare in Rural Schools](#) was held, in conjunction with the 2011 Korea-Japan Society of Educational Administration Symposium, at the Kongju National University Kongju, Korea in February. This continued collaboration included keynote speakers from Australia, Korea, Japan, USA and Canada, and again, papers presented were reviewed by an international scientific committee and published in the symposium proceedings.

The third symposium, [ISFIRE 2013 Rural Education on the Global Stage: Connecting for Innovation](#) was held, in collaboration with the Society for the Provision of Education in Rural Australia (SPERA), at the University of Western Australia (Perth, Australia), in February. Keynote speakers were from the USA, Canada and Australia, and to align with the usual SPERA process, abstracts only were reviewed with presenters encouraged to submit papers to the Australian and International Journal of Rural Education (AIJRE) for review. This strategic decision has been replicated in subsequent symposia to encourage more presenters to publish in rural education journals, reaching a wider audience and providing a stronger contribution to the field of rural education.

The international collaboration for the fourth symposium to be held in Canada unfortunately was not able to host ISFIRE2015. SPERA kindly offered to host an international ISFIRE presence at their annual conference the following year. Thus, the fourth symposium **4th ISFIRE** (never actually referred to as ISFIRE 2016) combined with the 32nd National SPERA Conference [Rural Education: Place, Pedagogies, Partnerships and Possibilities](#), in September, hosted by Central Queensland University (Ooralea, Mackay, Australia), supported by the University of Tasmania (Australia), with keynote speakers from Mexico, Norway and Australia.

Now, here we are at the fifth symposium, [ISFIRE2018 Communities and Partnerships: Strengthening Rural Education](#), hosted by the Center for Research in Rural Education, with keynotes from the United States of America and Australia. Where will **ISFIRE2020** be hosted? If you are involved with an institution that focuses on rural education and would like to host ISFIRE2020, we would like to hear from you! This is an opportunity to make a significant contribution to the direction of rural education research and practice globally.

ISFIRE Schedule for Wednesday August 1, 2018

7:30 Registration Help Desk Open
MSU Student Union Building (SUB)

9:00 Welcome
SUB Ballroom A
John Pegg, Director, SiMERR National Research Centre, University of New England, AU
Jayne Downey, Director, Center for Research on Rural Education, MSU
Alison Harmon, Dean, College of Education, Health, & Human Development, MSU
Bob Mokwa, Provost, MSU
Senator John Tester, State of Montana

9:30 Keynote Address
SUB Ballroom A
Sweeney Windchief, Assistant Professor, Montana State University
The Sharing of Indigenous Knowledge Through Academic Means by Implementing Self-reflection and Story

10:30 Morning Tea & Coffee
SUB Ballroom A

11:00 Parallel Session 1
SUB Ballroom B, C, D, 233

12:30 Lunch & Rural Highlight
SUB Ballroom A

2:00 Interactive Panel
SUB Ballroom A
Community Responsive Leadership Preparation: Explicit Objectives and Tacit Accomplishments
Bill Ruff (chair), **Godfrey Saunders**, **Jason Cummins**

3:30 Afternoon Tea & Coffee
SUB Ballroom A

4:00 Parallel Session 2
SUB Ballroom B, C, D, 233

5:30 Break

6:00 Welcome Reception
MSU's Museum of the Rockies
Sponsored by SiMERR National Research Centre, University of New England, AU

11:00 - 12:30 Wednesday, August 1: Parallel Session 1

	SUB Ballroom B	SUB Ballroom C	SUB Ballroom D	SUB Room 233
	Theme 2 - Partnership	Theme 3 - Profession	Theme 4 - Practice	Theme 5 - Students
11:00-11:30 Presentation A	Allison Wynhoff Olsen, Kirk Branch, Jan Zauha, Montana State University & Emily Nelson, Belgrade High School <i>Writing Together: Expanding Opportunities for Teachers and Students in Rural Communities</i>	Kerri Balint, Public Broadcasting Service; Ben Garcia, Southern Oregon Public Television; Kari Wardle, Idaho Public Television; Nikki Vradenburg, Montana PBS; Mekca Wallace-Spurgin, Iowa Public Television; & Darcy Bakkegard, Prairie Public Broadcasting	Amy Azano, Virginia Tech & Cat Biddle, University of Maine <i>Deficits, Dichotomies, and Other Traps in Problem Formation for Rural Education</i>	Kimberly McCluskey, Scotland County R-1 <i>Developing an Advanced Placement Program a Small, Rural School</i>
11:30-12:00 Presentation B	Patrick Hampton, University of Notre Dame, AU <i>Walk Beside Me, Learn Together: A Service-Learning Immersion to a Remote Aboriginal School and Community</i>	<i>Supporting Rural Educators: Lessons from the PBS Teacher Community Program</i>	Matthew Finster, Westat <i>Examining Productivity in Rural Education: Signals of Innovative Approaches and Best Practices</i>	Melinda Davis & Cassidy Hall, University of Idaho <i>Putting the "T" in STEM for Rural Educators</i>
12:00-12:30 Presentation C	Christine Stanton, Lucia Ricciardelli, Montana State University & Brad Hall, Blackfeet Community College <i>The Digital Storywork Partnership: Engaging Students, Educators, and Community Members in Research and Filmmaking</i>		Jesse Moon Longhurst, Southern Oregon University <i>"Here is lots of places": Teacher Preparation For and With Oregon's Rural Cultures and Rural Schools</i>	Chris Reading, University of New England, AU <i>The World Around Us: Nurturing Spatial Reasoning in Rural Schools</i>

4:00 - 5:30 Wednesday, August 1: Parallel Session 2

	SUB Ballroom B	SUB Ballroom C	SUB Ballroom D	SUB Room 233
	Theme 1 - Community	Theme 2 - Partnership	Theme 3 - Profession	Theme 6 - Leadership
4:00-4:30 Presentation A	Outi Marja Autti & Unn-Doris K. Baeck, UiT The Arctic University of Norway Teaching Should Not be a Bubble Disconnected from the Community: Rural Teachers and Local Curricula	Steven L. Johnson, Lisbon Public Schools The Value of Rural School/Community Partnerships	Jesse Longhurst, Southern Oregon University, Michael Thier, University of Oregon, Phillip Grant, Jr., University of West Georgia, Sheryl D. Craig, University of Oklahoma, & Casey Jakubowski, University at Albany: State University of New York Geographic and Methodological Gaps in U.S. Rural Education Research	Hobart Harmon & Thomas Butler, Appalachia Intermediate Unit 8 Building Leadership Capacity for Scaling Innovations in Rural School Districts
4:30-5:00 Presentation B	Jennifer Lutey & Tina Hamilton, Brightways Learning Do You Generate "Webs of Support" in Your School?	Jeff Hawkins & Dessie Bowling, Kentucky Valley Educational Cooperative Appalachia Rising	Tom Schram, Kathryn McCurdy, Tom Higginbotham, & Dan Lord, University of New Hampshire Place Matters: Review of the Literature on Rural Teacher Education	Micah Wixom, Education Commission of the States How the Sausage Gets Made: Engaging in the Policy-Making Process
5:00-5:30 Presentation C	Samantha Avitaia, University of Wollongong, AU Developing a Contextualized Model of Outreach for Rural Communities	Brad Mitchell, Battelle for Kids, Danette Parsley, Education Northwest & Kristina Hesbol, University of Denver Rural School Partnerships: Connecting Improvement Science, Collective Impact and Place Based Education	Nick Kleese, University of Minnesota Conversation as Method: Toward a More Rurally Attuned Methodology	Devon Brenner, Mississippi State University & Susan McClelland, University of Mississippi Building the Advocacy Skills of Rural Leaders

ISFIRE Schedule for Thursday August 2, 2018

8:00 Registration Help Desk Open
MSU Student Union Building (SUB)

9:00 Keynote Address
SUB Ballroom A
Simone White, Assistant Dean (International and Engagement) Queensland University of Technology, Brisbane, AU
Schooling Teachers for Rural Communities? Sharing the Lessons from Rural Education Research

10:00 Morning Tea & Coffee
SUB Ballroom A

10:30 Parallel Session 3
SUB Ballroom B, C, D, 233

12:00 Lunch & Rural Highlight
SUB Ballroom A

1:30 Interactive Panel
SUB Ballroom A

Educating for Sustainability in Remote Locations
Chris Reading (Chair), **Dawn Wallis** (Canada), **Neil Taylor** (Nauru), **Constance Khupe** (South Africa), **Morag Redford** (Scotland), **Patrick Hampton** (Australia), **Tena Versland** (USA)

3:00 Afternoon Tea & Coffee
SUB Ballroom A

3:30 Parallel Session 4
SUB Ballroom B, C, D, 233

5:00 Break

5:30 Reception
SUB Ballroom A

6:00 Dinner
SUB Ballroom A

Keynote Address: Allen Pratt, Director, National Rural Education Association
Rural Education and Public Policy: A Major Enterprise
Sponsored by the John W. Kohl Educational Leadership Endowment, Montana State University

10:30 - 12:00 Thursday, August 2: Parallel Session 3

	SUB Ballroom B	SUB Ballroom C	SUB Ballroom D	SUB Room 233
	Theme 2 - Partnership	Theme 3 - Profession	Theme 4 - Practice	Theme 5 - Students
10:30-11:00 Presentation A	Elizabeth Wargo, Davin Carr-Chellman & Kathy Canfield Daviss, University of Idaho, & Kathleen Budge, Boise State University Rural Stakeholders and Research-Practice Partnership Involvement	Jennifer Lutey & Tina Hamilton, Brightways Learning Making (and Keeping) Resilient Educators	Richard Kitzmiller, Niswonger Foundation, Susan Savell, Building Assets, Reducing Risks (BARR) Center, Rachel Bear, National Writing Project & Casey Olsen, Columbus High School, National Leadership Team College, Career, and Community Writers Program	Tricia Seifert, Montana State University "Gaming" the Transition to Post-secondary Education
11:00-11:30 Presentation B	Joe Hicks, Kristofer Olsen, Allison Wynhoff Olsen Montana State University & Danette Long, Northern State University Integrating Rurality in Teacher Preparation	Jennifer Luebeck, Montana State University Reaching Rural Mathematics Teachers: Effective Strategies for Online/Blended Professional Learning	Facilitator: Victoria Schaefer, Westat Innovative Approaches to Improving Rural Students' Achievement: Interventions for Personalized Learning in Middle School, Social-Emotional Learning in 9th Grade, and Writing in Secondary Schools	Natalie Downes & Philip Roberts, University of Canberra, AU Rethinking Distance Education and ICT Use: Advancing Arguments of Access to Quality Teaching & Learning
11:30-12:00 Presentation C	Brian O'Neill, Calen District State College, AU Different Strokes: Different Spokes for Different Folk	Maria Coady, University of Florida Rural Teacher-Leader Professional Development for English Learners in an Anti-Immigrant Climate		Constance Khupe, University of the Witwatersrand, Johannesburg Understanding the First-Year Experience of Students from South African Rural Schools

3:30 - 5:00 Thursday, August 2: Parallel Session 4

	SUB Ballroom B	SUB Ballroom C	SUB Ballroom D	SUB Room 233
	Theme 3 - Profession	Theme 4 - Practice	Theme 5 - Students	Theme 6 - Leadership
3:30-4:00 Presentation A	Neil Taylor & Penelope Serow, University of New England, AU A New Model of Teacher Education for Small Island States: The Nauru Teacher Education Project	Heather Fisher, Montana State University Successful Writing Instruction in a High Poverty Middle School in the Era of Standardized Writing Assessment	Kate Caton, Georgia State University Retention Policy, Direct Certification, and Rurality in Georgia	Brian O'Neill, Queensland State P-10/12 School Administrators' Association, AU Who Ya' Gonna Call? Ghostbusters or Mentors?: Mentoring for New Rural Principals
4:00-4:30 Presentation B	Morag Redford, University of the Highlands and Islands & Anne Patterson, Argyll and Bute Council, Scotland Place-based Rural Teacher Education in Scotland	Kristi Borge, Polaris School Instructional Planning Practices of Rural, Multi-grade Teachers: A Case Study	Phillip Grant, Jr., University of West Georgia What Do Your Parents Make? The Overriding Effect of Socioeconomic Status for Rural Students	Lora Wolff, Western Illinois University & Michaela Fray, Quincy Public Schools Growing Success: The Need for Rural Schools to Collaboratively Succession Plan to Grow and Sustain Their Leadership Pipelines
4:30-5:00 Presentation C	Harvey Rude, Colorado Center for Rural Education at the University of Northern Colorado Systemic Recruitment and Retention of Rural Educators	Elizabeth Reiersen, Miles City High School, Allison Behrens, Whitehall Middle and High School & Catherine Dorian, Fort Benton Schools Teacher Inquiry and Innovations Across Rural Contexts	Sarah Schmitt-Wilson, J. Mitchell Vaterlaus & Ashley Beck, Montana State University Rural Adolescents' Educational and Occupational Values: Are They Different and Do They Matter in Young Adulthood?	Dawn Wallin & Paul Newton, University of Saskatchewan, CA Leadership in Community: Strengthening Rural Education

ISFIRE Schedule for Friday August 3, 2018

8:00	Registration Help Desk Open MSU Student Union Building (SUB)	12:00	Lunch & Rural Highlight SUB Ballroom A
9:00	Keynote Address SUB Ballroom A John Pegg , Director SIMERR National Research Centre, University of New England, AU <i>Strengthening Rural Education: Alternatives in Enhancing Education in Rural Areas</i>	1:30	Interactive Panel SUB Ballroom A <i>Strengthening Rural Education: Partnering for Enduring Success</i> Alison Harmon (Chair), Sweeney Windchief, Simone White, Allen Pratt, John Pegg
10:00	Morning Tea & Coffee SUB Ballroom A	3:00	Afternoon Tea & Coffee SUB Ballroom A
10:30	Parallel Session 5 SUB Ballroom B, C, D, 233	3:30	Parallel Session 6 SUB Ballroom B, C, D, 233
		5:00	Farewells / Departures Registration Help Desk

10:30 - 12:00 Friday, August 3: Parallel Session 5

	SUB Ballroom B	SUB Ballroom C	SUB Ballroom D	SUB Room 233
	Theme 5 - Students	Theme 3 - Profession	Theme 4 - Practice	Theme 6 - Leadership
10:30-11:00 Presentation A	Susan Sullivan, Montana State University <i>Personalized Teaching/ Learning in the K-16 Classroom</i>	Unn-Doris Baeck & Outi Autti, UiT The Arctic University of Norway <i>"Here Comes the Teacher": Being a Teacher in a Rural Community</i>	Tom Lowrie, Robyn Jorgensen & Natalie Downes, University of Canberra, AU <i>Space, Place, & Mathematics: Exploring the Diverse Mathematical Knowledges of Rural and Remote Students in Australia</i>	Ivan Lorentzen, Flathead Valley Community College & William McCaw, University of Montana <i>A Systems Approach to Improved District Performance: Perhaps People are Not the Problem</i>
11:00-11:30 Presentation B	Beth Kennedy, Hailey Buckley & Alex Hardy, Montana State University <i>Developing a Rural Educator Self-Identity: A Pre-Service Teacher Early Field Experience</i>	Meredith McCool, Sweet Briar College <i>"This is a Rural Activity": An Activity Theory Perspective on Rural Classrooms</i>	Rose Vallor, Montana State University <i>Teaching Outdoors: A Multiple Case Study of Teachers' Methods and Motivations Practicing School-based Outdoor Teaching</i>	Allison Wynhoff Olsen, Kirk Branch, Montana State University, Alan Hoffmann & Amber Henwood, Savage High School <i>Creating a Team of Teacher Leaders in Remote Schools and Local Communities</i>
11:30-12:00 Presentation C	Kimberly McCluskey, Scotland County R-1 <i>Increasing Equity and Access in Dual Credit Programs</i>	Melyssa Fuqua, Monash University, AU <i>Importance of Rural Careers Educators' Local Professional Networks</i>	Lauren Dotson, Montana State University <i>Rural Education and the Need for Trauma-Informed Care</i>	Morag Redford, University of the Highlands and Islands Scotland <i>The Role of Values In a Teacher Leadership Programme for Scottish Island Communities</i>

3:30 - 5:00 Friday, August 3: Parallel Session 6

	SUB Ballroom B	SUB Ballroom C	SUB Ballroom D
	Theme 2 - Partnership	Theme 3 - Profession	Theme 6 - Leadership
3:30-4:00 Presentation A	Vicki Howard, University of Montana Western & Lona Running Wolf, Napi Elementary School <i>Building Capacity within Rural Indigenous Communities</i>	Tena Versland, Janessa Parenteau & Lynne Peterson, Montana State University <i>MSU's Rural Practicum: A Promising Practice to Address Teacher Recruitment and Retention</i>	Ivan Lorentzen, Flathead Valley Community College & William McCaw, University of Montana <i>The Five Standards of Boardmanship and their Relationship with Student Achievement</i>
4:00-4:30 Presentation B	Suzanne Arnold & Barbara Seidl, University of Colorado, Denver <i>Maximizing Partnerships in Rural Communities: Multiple Pathways to Support Teacher Development</i>	Susan Gregory & Rene Rosell Yarbrough, Montana State University Billings <i>Meeting the Need for Special Education Teachers in Rural Areas</i>	Daniel Lee, University of Montana, Jennifer Lutey & Lisa Kerscher, Brightways Learning <i>Rural Schools, Standards-Based Teacher Evaluation and Technology's Odyssean Promise</i>
4:30-5:00 Presentation C	Ryan Fowler, TNTP, Allen Pratt, NREA, & Steven Johnson, Lisbon Public Schools <i>Designing a National Talent Strategy for Rural Schools</i>	Robert Mitchell, University of Colorado, Colorado Springs & Megan Quitter, Colorado Department of Education <i>Filling Classrooms: Colorado's Efforts to Resolve the Educator Shortages in Rural Colorado</i>	Melody Schopp, Consultant <i>Building a Foot Bridge in Rural Education</i>

ISFIRE 2018 Keynote Speakers

Wednesday, August 1
9:30 am in SUB Ballroom A

Dr. Sweeney Windchief
 Assistant Professor of Adult & Higher Education
 Montana State University, Bozeman

The Sharing of Indigenous Knowledge Through Academic Means by Implementing Self-reflection and Story



Indigenous research scholars navigate a complex landscape that is impacted by their relationships, as well as the roles and responsibilities that come with both their Indigenous and professional positionality. This presentation contemplates the passing of Indigenous knowledge through academic means by implementing self-reflection and story. Concluding that Indigenous research is for Indigenous community, this presentation explores questions such as; what are the “Rules” to using Indigenous methodologies in research? How can we use Indigenous methodologies in research that reflect the nuance of our community identity? How can we reciprocate in the sharing of Indigenous knowledge? Finally, how can we share Indigenous knowledge in a way that maintains cultural protocol? The practical implications of this work include support for Indigenous methodologies and considers the cultural context of the ISFIRE community. Future scholarship connected with this work includes complicating the perceptions of research from 1) academic perspectives and 2) Indigenous community perspectives which can be considered internationally, nationally, or locally.

Bio – Sweeney Windchief, a Nakoda member of the Fort Peck Tribes in northern Montana, serves as an Assistant Professor of Adult and Higher Education at Montana State University. His research interests include higher education specifically under the umbrella of Indigenous intellectualism. Sweeney is currently a Co-PI on an NSF sponsored AGEP-T Grant entitled: Pacific Northwest Circles of Success in Mentoring Of Students (PNW-COSMOS) and a grant for improving the pathways for Rural and American Indian Students Entering Computer Science Via Storytelling. His teaching privileges include critical race theory, Indigenous methodologies in research, law and policy in higher education and institutional research. His outreach and community engagement activities include; MSU’s American Indian Student Center Executive Committee, the College Horizons advisory council, and a member of the AERA Indigenous Peoples of the Americas (IPA) SIG awards committee. He and his wife Sara have two sons who help keep things in perspective.

ISFIRE 2018 Keynote Speakers

Thursday, August 2
9:00 am in SUB Ballroom A

Professor Simone White
 Assistant Dean (International and Engagement)
 Faculty of Education
 Queensland University of Technology, Brisbane, Australia



Schooling Teachers for Rural Communities? Sharing the Lessons from Rural Education Research

Research continues to tell the tale, that rural schools experience higher teacher shortages and staffing churn than their city counterparts. This story is reflected in most countries across the world. This presentation looks firstly at what we know about the global rural staffing ‘crisis’ phenomenon, exploring both the research and policy landscape across countries such as the US, Australia and Canada. Attention then turns to providing a range of counter-narratives where rural school communities have gone against this trend. Illustrations of practice will be shared from across a variety of school-university-community based initiatives.

Stories of success from the rural field highlight that teacher education is the key. Both at the pre-service level through initial teacher education and at the professional development level for teachers and importantly rural school leaders. Studies have identified key links between the sustainability of rural communities and teacher preparation, finding that rural communities stand to benefit from teacher education curriculum that is inclusive of rural education needs. Understanding and valuing rural places can be a central core to all teacher education curriculum and professional experience. Schooling teachers and importantly re-schooling teacher educators can provide the very solution to enabling thriving rural communities and ensuring the learning and well-being for all rural students.

Bio – Simone White is Professor and Assistant Dean (International and Engagement) in the Faculty of Education at Queensland University of Technology (QUT). Simone is also the Immediate Past President of the Australian Teacher Education Association (ATEA). Simone’s publications, research and teaching are focused on the key question of how to best prepare teachers and leaders for diverse rural, regional and remote communities (both local and global). Her current research areas focus on teacher education policy, teacher development, professional experience and building and maintaining university-school/community partnerships.

Simone currently leads an Australian government funded project focused on improving the preparation of future teachers to work in partnership with Aboriginal and Torres Strait Islander parents and caregivers. Through her collective work, Simone aims to connect research, policy and practice in ways that bring teachers and school and university based teacher educators together and break down traditional borders between academics, policy makers, communities and practitioners.

ISFIRE 2018 Keynote Speakers

Thursday, August 2
7:00 pm in SUB Ballroom A

Dr. Allen Pratt
Executive Director, National Rural Education Association

University of Tennessee, Chattanooga



Rural Education and Public Policy: A Major Enterprise

In 1944, the White House Conference on Rural Education published a report stating the belief that “the rural schools are a fundamental and indispensable means of building and maintaining in America the most glorious rural life anywhere in the world” and that “there is nothing involved that cannot be adequately coped with if public policy, state and national, makes available (1) the teaching personnel devoted to the education of rural children and equipped by education for that important work, (2) the leadership—national, state, and local—necessary to promote and operate the kind of schools needed, and (3) the financial resources necessary to maintain adequate educational opportunities (Dawson, 1944, p.42).

Fast-forward to 2018, and Dawson’s words continue to ring true. It is critical that we carefully examine aspects of state and federal education policy from the perspective of rural schools and communities across the United States and understand how these rural schools and communities address the work which has been mandated from afar and manage to educate their students.

Citation: Dawson, H. A. (1944). *Trouble at the Crossroads*. The White House Conference on Rural Education. Washington, D.C.

Bio – Dr. Allen Pratt currently serves as the Executive Director of the National Rural Education Association. In the past, he has served as a high school science teacher and coach, a high school principal, assistant superintendent/curriculum director, executive director of the Tennessee Rural Education Association, executive director of the East Tennessee Center of Regional Excellence for the Tennessee Department of Education, and rural outreach liaison for Lincoln Memorial University. His primary interests are those issues which impact rural schools and the role of instructional leaders at the district and building levels. He is also involved at the University of Tennessee at Chattanooga in the School of Education and their Educational Leadership program.

ISFIRE 2018 Keynote Speakers

Friday, August 3

9:00 am in SUB Ballroom A

Professor John Pegg
 Director, SiMERR National Research Centre
 School of Education
 University of New England, Armidale, Australia



Strengthening Rural Education: Alternatives in Enhancing Education in Rural Areas

Australia continues to be at cross-roads in terms of equity of opportunities and achievements for students in rural and remote areas compared to those of their metropolitan peers. Is this the perspective of other Countries? Despite numerous reports on rural education in Australia, and continued efforts by State and Territory governments, to address the situation little, if anything, has changed. In Australia: country-wide comparisons using national and international tests show continued disparity of achievement among remote, provincial and metropolitan students; rural schools continue to be staffed by Australia's least experienced teachers; and there is no nationally cohesive framework to address systematically the concerns and issues that have plagued education provision in rural Australia for several decades. Do these points resonate with issues in rural schools in other countries? This presentation considers possible alternatives for rural Australia (and possibly other countries) through the lenses of student learning, teacher quality and government policies.

Bio – John Pegg began his career as a secondary mathematics teacher. Currently, he is Professor and Foundation Director of the National Centre for Science ICT and Mathematics Education for Rural and Regional Australia (SiMERR National Research Centre) based at the University of New England, Armidale, Australia. His work is far-ranging, and he is known for his contribution to theory-based cognition research in Mathematics Education and Assessment, especially linked to the SOLO Model. He is a Chief Investigator for the brain-based, Australian Research Council Australian Science of Learning Research Centre based at the Queensland Brain Institute, Brisbane, Australia.

John advocates for equality of educational learning outcomes for students and teachers regardless of their geographic circumstance. He has strong links with schools, professional teaching associations, and educational authorities in Australia and overseas, as a consultant/evaluator in a diverse range of educational contexts. He recently completed a five-year term as the Minister's nominee on the peak education body in New South Wales. In the past few years John has been team leader on many significant large-scale Australian and International projects linked to: underachieving learners in basic Mathematics and Literacy, state-wide diagnostic testing in Science, developmental-based assessment and instruction, validation of the Australian National Professional Standards for Teachers, investigating school faculties achieving outstanding student-learning outcomes (ÆSOP study), and promoting system-wide quality reforms in teacher education in the Philippines through the establishment of the Philippine National Research Centre for Teacher Quality (RCTQ) and the development into policy of the Philippine Professional Standards for Teachers (PPST).

Interactive Panel Discussions

Wednesday, August 1

2:00 pm

SUB Ballroom A

Community Responsive Leadership Preparation: Explicit Objectives and Tacit Assumptions

Participants: Bill Ruff (Chair), Godfrey Saunders, Jason Cummins

The *Indian Leadership Education and Development (I LEAD)* project has been preparing American Indian educators for school leadership positions for more than a decade. I LEAD graduates have held leadership positions at every level within the American educational system—school, district, state, tribal and federal. Using the I LEAD project as an example of an educational leadership preparation program that purposefully sought to prepare leaders who were responsive to the needs of their rural communities, this panel discussion will explore the following essential question:

How are community responsive leaders prepared and what impact can they have on local rural communities?

In exploring this essential question, the panel will attempt to answer the following questions from the perspectives of program design, program implementation, and local engagement:

1. What were the explicit objectives of the I LEAD project?
2. How was the I LEAD program designed to meet these objectives and how has it changed over the course of twelve years?
3. What is different about I LEAD project that can be generalized to community responsive leadership preparation?
4. What impact have I LEAD graduates had on school systems serving specific rural communities?

Interactive Panel Discussions

Thursday, August 2

1:30 pm

SUB Ballroom A

Educating for Sustainability in Remote Locations

Participants: Chris Reading (Chair), Dawn Wallis (Canada), Neil Taylor (Nauru), Constance Khupe (South Africa), Morag Redford (Scotland), Patrick Hampton (Australia), Tena Versland (USA)

At a time when social, economic and political decisions, along with extreme weather events, challenge the viability of communities in remote locations, educators need to rise to the challenge of preparing the youngsters in these communities to work towards sustainability for a more certain future.

What innovative approaches have been taken towards educating for sustainability in remote locations and what are the challenges faced?

A popular view of sustainability derives from viewing sustainable development as meeting “the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland Report, 1987). To achieve sustainability in any particular context or situation, three important pillars have to be addressed: social sustainability, environmental sustainability, and economic sustainability.

For a community to be sustainable it must be “economically, environmentally, and socially healthy and resilient” (Institute for Sustainable Communities). This sustainability is more likely to be achieved through integrated solutions rather than fragmented approaches that meet one goal at the expense of another. So, to work towards sustainability communities need to drive innovation but not compromise “way of life.”

Communities can be remote for different reasons but mostly these involve difficulties of access. Often this is for geographic reasons: mountain ranges, thick vegetation, sparse vegetation, bodies of water or just vast distance from more populous areas. However, social, cultural, economic or political divisions can also cause communities to be “remote.”

What can educators do for their students to help remote communities work towards more sustainable solutions: environmental; cultural; social; economic? What is already being achieved in remote locations? What were the challenges in achieving this? How were the challenges met?

This interactive panel provides the opportunity to consider educating for sustainability in remote locations. The panel members, each from a different country, will share innovative solutions and/or challenges related to their own country. The interactive structure of the panel will allow for discussion and wider sharing of innovative practice.

Interactive Panel Discussions

Friday, August 3

1:30 pm

SUB Ballroom A

Strengthening Rural Education: Partnering for Enduring Success

Participants: Alison Harmon (Chair), Sweeney Windchief, Simone White, Allen Pratt, John Pegg

For the past 3 days, we gathered together for an international forum on rural education with the specific intent of celebrating the importance of rural education, discussing our common challenges, and sharing innovative solutions to address our collective concerns. We thoughtfully shared our research findings, innovative practices, and evaluated approaches linked to positive, practical outcomes and actions for our students and our communities.

Now as we approach our final interactive panel discussion and look to the days beyond ISFIRE 2018, we want to consider a renewed vision for future partnerships designed to support rural education and foster success for all.

What are some of the innovative approaches we can take to form partnerships that will strengthen rural education and support our rural schools and communities?

As we return to our rural communities, how can we engage in various levels of partnerships (international, national, regional, local), with various types of partners (governments, organizations, businesses, community groups, individuals), in ways that help us to address our very real challenges and foster enduring success for our students, our schools, our communities, and ourselves?

Our keynote speakers on this panel will share their perspectives and offer some insights for all of us to consider regarding the nature and role of effective partnerships, approaches to establishing and sustaining healthy partnerships over time, and the evolving nature of partnerships in our global community.

It is our hope that our discussion together will inform and inspire the development of, and your participation in, effective, purposeful, and productive partnerships for many years to come.

Wednesday, August 1
11:00 - 12:30

SUB Ballroom B

Theme: Partnership

11:00-11:30 *Writing Together: Expanding Opportunities for Teachers and Students in Rural Communities*

Allison Wynhoff Olsen, Kirk Branch, Jan Zauha, Montana State University & Emily Nelson, Belgrade High School

Teachers writing with teachers at the Yellowstone Writing Project (YWP) create an engaged learning community. YWP capitalizes on writing's capacity to foster creative approaches to ideas and cultures within communities as we extend our reach into remote, rural settings through partnerships with Big Sky Country Fair (BSCF), Montana State University (MSU) Library and the Ivan Doig Archive, Museum of the Rockies (MOR), and International Youth Silent Film Festival (IYSFF). This presentation provides snapshots into our partnerships, considerations of how these partnerships involve rural teachers and schools, and how we make use of multifaceted assessments to monitor and evaluate joint-success and mutual benefit.

Drawing upon Teacher Action Research methodologies, we offer preliminary findings: With BSCF, rural adults and children statewide participate in a writing contest that engages them in sharing their Montana stories. With MSU Library's Doig Archive, primary documents reach rural Montana classrooms to open a window on an award-winning author's approach to writing as creative process linked to place. With MOR, unique expertise and resources are shared amongst educators, museum professionals, and students to create writing opportunities for museum guests, offer professional development for educators, and provide writing workshops for student writers. With IYSFF, Montana students engage in storytelling via silent film, giving international voice to their experiences.

Across YWP's collaborative pairings, three implications emerge: (1) We are building robust connections across MT classrooms; (2) We have increased participation and leadership from rural MT students; (3) We are building university-related relationships with rural schools across the state.

11:30-12:00 *Walk Beside Me, Learn Together: A Service-Learning Immersion to a Remote Aboriginal School and Community*

Patrick Hampton, University of Notre Dame, AU

The aim of this study was to explore the potential of a service-learning immersion program to promote pre-service teachers' development of cultural competency in the area of Aboriginal education. That is, the research focused on ways the immersion program helped pre-service teachers (a) develop awareness of cultural implications in teaching in a remote school and (b) understand and respect Aboriginal people with a view to reconciliation. The program has operated since 2013 and occurs in a remote Aboriginal school and community in Western Australia. The duration of the immersion is eight days and is open to early childhood, primary and secondary pre-service teachers. The underlying epistemology of the research is constructivist, specifically interpretivist in nature, with a symbolic interactionist lens. That is, the research attempts to "give voice" to the participants through their own language. Content analysis was the methodology used to explore the pre-service teachers' experiences and perceptions while undertaking their service-learning immersion. Data collection methods included focus group interviews, participant journals and a questionnaire. These data were collected over a four-year span from 2014 to 2017. The findings indicate that the service-learning immersion has enabled pre-service teachers to explore their interests and passion to teach Aboriginal students in both rural and remote locations.

12:00-12:30 *The Digital Storywork Partnership: Engaging Students, Educators, and Community Members in Research & Filmmaking*

Christine Stanton, Lucia Ricciardelli, Montana State University & Brad Hall, Blackfeet Community College

The Digital Storywork Partnership (DSP) integrates community-based participatory research (CBPR) with Indigenous Research Methodologies (IRMs) to advance culturally revitalizing pedagogy, interdisciplinary scholarship, and creative activity in rural and tribal communities across Montana and Wyoming. Partners include Indigenous high school youth and educators; community nonprofits; university and tribal college students, faculty, and alumni; and elders, language teachers, and tribal leaders from multiple Indigenous nations. Through DSP activities, students conduct community-centered research and create films for dissemination of educational content. To frame DSP activities, we apply 6 Rs (respect, responsibility, relevance, reciprocity, relationality, and representation) identified as central to Indigenous research and education. Generally, the DSP process emphasizes: 1) identifying community research and educational interests, cultural protocol needs, and methodological/technical/creative recommendations; 2) applying appropriate methods to investigate community interests and share cultural knowledge; and, 3) debriefing and planning for future action with community partners and educational institutions. The DSP is very different from conventional approaches to research, education, and filmmaking given its focus on community decision-making and protection of culturally sensitive content. This presentation will describe the DSP model (as both a teaching pedagogy and research methodology), share examples from research and filmmaking workshops, and overview benefits and challenges specific to rural contexts. The DSP advances work related to multiple areas of interest within rural education, particularly those related to rural partnerships, revitalizing Indigenous ways of knowing, integrating technology to support learning, and nurturing leadership development in students and community members.

Wednesday, August 1
11:00 - 12:30

SUB Ballroom C

Theme: Profession

11:00-11:30 *Supporting Rural Educators: Lessons from the PBS Teacher Community Program*

Kerri Balint, Public Broadcasting Service
 Ben Garcia, Southern Oregon Public Television
 Kari Wardle, Idaho Public Television
 Nikki Vradenburg, Montana PBS
 Mekca Wallace-Spurgin, Iowa Public Television
 Darcy Bakkegard, Prairie Public Broadcasting

In select rural areas of the U.S., five former classroom teachers have been embedded at local PBS stations and have undertaken the challenge of creating connections among local educators. For about a year they have been providing quality professional development for rural educators in their area as part of a PBS Teacher Community Program (TCP) which is a grant their station has received. Funded by the Ann Ray Foundation with data gathering support from Rockman et al, this five-state (OR, ID, MT, ND, IA) three-year pilot project aims to reduce teacher isolation while stimulating greater collaboration between educational stakeholders.

This five-state (OR, ID, MT, ND, IA), three-year pilot project, intends to 1. Reduce teacher isolation 2. Stimulate greater collaboration and connection between local educational stakeholders 3. Address local teacher needs and offer professional learning opportunities based on PBS research findings, and 4. Connect local educators with their local station so their stories can be told to the broader community.

In Oregon, Teacher Ambassador Ben Garcia, is developing partnerships with individual teachers, local schools, local school districts, and also the local Educational Service District to participate in the planning of new, or existing: teacher summits, technology conferences, technology integration teams, various types of professional development workshops and also student camps. The vital process of telling the Teacher Community Program story, not just from a research standpoint, is just beginning to take form at SOPTV and other TCP stations. We hope to effectively relay this fascinating story about what we have learned thus far.

In Idaho, Kari Wardle, is working with three rural schools to provide technology integration training and coaching, including in-classroom modeling for teachers, working with collaborative teams, and providing one on one coaching. Additionally, she is working to increase awareness of the resources available to teachers by traveling state wide and attending and presenting at conferences and workshops.

In Montana, Nikki Vradenburg is serving three rural school districts as a technology integration coach. By meeting with teachers within the context of the school day she is attempting to offer free, personalized, embedded and on-going professional development to K-12 teachers that includes one to one coaching meetings, modeled lessons, co-teaching, providing topical webinars, small group planning sessions and after school workshops.

In Iowa, Teacher Ambassador Mekca Wallace-Spurgin is embedded in the Centerville Community School District in the southernmost part of the state. She is developing various professional development opportunities, courses for credit and recertification, and meets with K-12 educators on a daily basis to provide support for the integration of technology. Mekca also helps with the implementation of the PBS Student Reporting Lab at Centerville High School in an effort to promote student voice.

In North Dakota, Teacher Ambassador Darcy Bakkegard is developing partnerships with various state agencies to maximize resources, networking with schools to create virtual PLCs and technology cadres, providing topical webinars for teachers, and coordinating various professional development workshops -all free for educators.

Wednesday, August 1
11:00 - 12:30

SUB Ballroom D

Theme: Practice

11:00-11:30 ***Deficits, Dichotomies, and Other Traps in Problem Formation for Rural Education***

Amy Azano, Virginia Tech & Cat Biddle, University of Maine

This presentation attempts to name and dispel rural deficit narratives underlying conceptions of rurality and theoretical constructs in rural education research. While education research relies on identifying “problems” we question if problem literature has reified the pervasive and enduring deficit frames scholarship attempts to disrupt. For this work, we glean insight from deficit ideologies in urban education and question how this ideology might be operationalized in rural spaces. Given this theoretical foregrounding, we ask what rural education literature does to position deficit thinking about rural teachers, students, and spaces. We also ask how rural education researchers can address deficits without using deficit theory. Gorski (2010) posits to dismantle deficit thinking, one must identify the signs that a deficit ideology is at play. These include shared assumptions and stereotypes, embedding poverty and inequalities within cultures, and a lack of understanding of the sociopolitical contexts at play. In thinking about preparing teachers for work in urban schools, Lazar (2007) says we must dismantle a legacy of racial prejudice. Is that same dismantling needed in rural schools and research? How do we advocate for rural communities where pride serves to mask provincialism, nationalism, or racism? How do we move conversations away from the “culture of poverty” to understandings around food or housing insecurities to make concrete the abstract language used to characterize rural people and places? These questions and our reckoning with troubled rural narratives will serve as discussion points for participants working in and with rural communities.

11:30-12:00 ***Examining Productivity in Rural Education: Signals of Innovative Approaches and Best Practices***

Matthew Finster, Westat

Expectations for student performance continues to rise while many school districts are facing constrained budgets requiring school leaders to be more productive -- increasing outcomes for a given expenditure. While, rural districts and schools are often considered less productive than urban and suburban counterparts, exhibiting, on average, lower returns on investment (ROI), an analysis by Roza (2015) using national data from the United States demonstrates that one in five rural remote districts actually have a high ROI. These productive “bright spots” may provide valuable lessons about innovation and best practices. Using Wisconsin state data for elementary and middle schools (N = 2,114), we examine whether rural schools are more productive on average than nonrural schools, based on an ROI index that incorporates district expenditures and school-level value-added (VA) estimates, and the extensiveness of highly productive rural schools. While most ROI studies use measures of student achievement, which are highly correlated with socio-economic status and prior attainment, using school-level VA estimates in an ROI index provides a measure of student learning relative to education expenditures. The results of the multilevel regression analysis indicate that, on average, there are not statistically significant differences between schools’ productivity levels by locale; however, approximately one in five rural elementary schools were identified as being highly productive. Further examination of school-level funding allocations, service delivery models, and instructional practices in these bright spots may provide new insights into productivity and innovation in rural settings.

12:00-12:30 ***“Here is lots of places”: Teacher Preparation For and With Oregon’s Rural Cultures and Rural Schools***

Jesse Moon Longhurst, Southern Oregon University

Many graduates of Oregon teacher preparation programs will teach in rural and small town schools. Despite this, most teacher preparation programs in our state do not specifically address the varied realities of a rural teaching life and the variety and nuance of rural cultures and communities.

Rural people exist in contested space between an idolized rurality (and an imagined dark and backward rurality that is blamed for our current political and social woes. There has been much public wringing of hands of late about rural America which is imagined as either the wholesome repository of our best national qualities or to incubate racism and intolerance of all kinds. The success of books such as Vance’s *Hillbilly Elegy* (2016) speak to the public’s renewed curiosity and ambivalence about rurality and rural people.

The work we do to prepare rural teachers is fraught, particularly at this historical juncture when the public discourse about rurality and about public schools is louder and more vitriolic than ever. This is the landscape we navigate as we guide them through clinical practice and the intersection of school and community. This presentation interrogates what it means to be a culturally responsive teacher in rural Oregon and discusses strategies for preparing teachers for and with Oregon’s diverse rural cultures and rural communities.

Wednesday, August 1
11:00 - 12:30

SUB Room 233

Theme: Students

11:00-11:30 ***Developing an Advanced Placement Program a Small, Rural School***
 Kimberly McCluskey, Scotland County R-1

Scotland County R-1 (SCR-1), with a high school enrollment of under 200 students, is located in rural Missouri, hours from the closest metropolitan area. As part of our commitment to high quality education, an Advanced Placement program was implemented during the 2014-15 academic year. This session will walk through the process of developing a successful AP program through the use of professional learning communities and extensive collaboration. Small, rural schools face many challenges in developing AP programs and ways to overcome many of these in order to develop a true AP culture within the district will be shared. Various methods of collecting data to track the growth and success of the program will be discussed. In three short years, SCR-1 has improved from a 0% pass rate on the AP exams to a 40% pass rate in 2017, with growth expected in 2018 as well. The number of AP courses offered has increased from two to seven scheduled for the 2018-19 academic year. In 2017, the College Board reported that 33% of graduating public high school students had taken an AP exam; however, SCR-1 surpassed this at 46.3% for our class of 2017. The College Board also reported 11.4% of Missouri public high school students passed an AP exam, but SCR-1 exceeded this as well at 19.5%. Data from the 2018 AP exam cycle will also be shared. This presentation will highlight the strategies utilized by SCR-1 to facilitate the growth and development of a successful AP program.

11:30-12:00 ***Putting the "T" in STEM for Rural Educators***
 Melinda Davis & Cassidy Hall, University of Idaho

Effective technology integration professional development for rural K-12 educators must help teachers realize the impact of effective classroom technology use, be easy to implement, be usable with limited resources, and build upon prior knowledge and experience. By using the Danielson Framework for Teaching as a prior context, teachers may be more apt to consider using technology more broadly to support teaching and learning. In 2016 and 2017, summer STEM professional development institutes were delivered to over 500 K-12 teachers across Idaho focused on integration of technology in STEM education. Many of the participating teachers are from small, rural communities and from schools where they serve as the sole teacher of their curricular area. Teachers were instructed on use of technologies that were independent of the hardware used such that they could be utilized regardless of the resources available to them. The relationship between teachers' self-efficacy and implementation of technology in the classroom was investigated with pre and post institute surveys. The 2016 data demonstrated that many teachers are comfortable using technology for lesson planning and delivery but less so using it for other domains. However, 2017 data suggests that by using the framework, teachers consider technology uses in all domains. The significance of this study rests in the potential of this approach for more effective technology integration professional development, particularly in rural areas. Effective in this context means consistent and persistent integration through understanding how these practices impact both teachers and students.

12:00-12:30 ***The World Around Us: Nurturing Spatial Reasoning in Rural Schools***
 Chris Reading, University of New England, AU

The importance of spatial reasoning is becoming more widely recognised. Curricula around the world are including spatial reasoning more explicitly. Researchers are identifying, in particular, that young learners demonstrate informal spatial reasoning, that spatial reasoning can be developed through learning, and that there is a link between spatial reasoning and mathematical ability.

The investigation described in this presentation aimed to find out what rural schools are doing to nurture spatial reasoning and how successful this has been. Rather than initiate new data collection for this investigation, the researcher relied on projects already implemented that had been reported publicly. Analysis of these on-going or completed projects, related to spatial reasoning and mathematics, was undertaken to determine internationally what is being done and what works best.

A variety of projects implemented in rural spaces in different countries were identified. Interestingly, many of these projects involve Indigenous students. When projects focusing on spatial reasoning have incorporated connection with the local community, and acknowledged the importance of culturally-based and space-based mathematics learning there have been gains in mathematical engagement and ability.

The findings have the potential to encourage teachers to: change approaches to assessing students who are beginning school; plan activities that nurture pre-existing spatial reasoning; and connect the learning of spatial reasoning to fundamental mathematical concepts. Above all, those living in rural communities need to recognise the importance of spatial reasoning and how it contributes to every-day life in that community.

Wednesday, August 1**4:00 - 5:30****SUB Ballroom B****Theme: Community****4:00-4:30 *Teaching Should Not be a Bubble Disconnected from the Community: Rural Teachers and Local Curricula***

Outi Marja Autti & Unn-Doris K. Baeck, UiT The Arctic University of Norway

Our presentation focuses on the ways rural teachers in Finland use local contents in their teaching. The Finnish national core curriculum, drawn up by the Finnish National Agency for Education, frames the objectives of different subjects and planning of the contents of teaching. It includes e.g. pupil assessment, the principles of good learning environment, pupil welfare, and educational guidance.

National curriculum serves as a basis for the local curricula. The idea is to enhance equality in education throughout the country. The latest core curriculum for pre-primary and basic education was introduced in 2014. Since then, the municipalities have drawn up local curricula, which steer instruction and schoolwork in more detail, taking local needs and perspectives into consideration.

In rural municipalities, individual subject teachers are responsible for the local adjustments. Teachers are required to hold a master's degree and they are allowed an extensive pedagogic freedom in their work. In our case study, we interviewed 21 rural teachers and asked them about their thoughts and reflections on using local contents in their teaching. Teachers' role in implementing local contents is central. Their interest in the matters of local community is a key factor, but their background and the length of teaching experience also seem to influence the use of local contents. Teachers discussed the tension between implementing local contents and excluding children from the possibilities of the world. Balancing these two demands was considered a difficult task. Teachers' workload does not always give an opportunity to use local contents in teaching.

4:30-5:00 *Do You Generate "Webs of Support" in Your School?*

Jennifer Lutey & Tina Hamilton, Brightways Learning

Do you want healthy students, a happy staff, engaged parents, and an overall positive school climate? Then, come find out how seven research-based factors contribute to each person's feeling of self-worth and capacity to engage, learn, and grow. Explore with us how those factors can fortify student-to-adult connections, which ease classroom behavioral and management challenges for teachers.

5:00-5:30 *Developing a Contextualized Model of Outreach for Rural Communities*

Samantha Avitaia, University of Wollongong, AU

"It's hugely important, you making those connections are really, really important in a rural environment" (Rural principal, 2017). In the Bega Valley on the east coast of Australia, 15% of people gain a University qualification ** as opposed to 42% in major cities.* The University of Wollongong (UOW) Outreach & Pathways unit is very proud to be recognised as the Australian award winner for "Programs that Enhance Learning, category of Widening Participation 2017, Australian Awards for University Teaching.

Since 2011 UOW Outreach has been working with rural communities and in 2017 the UOW Bega regional campus received a Federal grant to extend their successful outreach model to schools in further remote locations. This model puts rural schools and students at the centre, developing practical programs that have rural university mentors engaging with rural school students, sharing personal success and challenges to demystify university and address barriers. Mills and Gale (2014) suggest that there is very little chance of encountering someone who acts in this way to disrupt young people's aspirations in an isolated rural community.

Contextualising the Design and Evaluation Matrix for Outreach (DEMO) framework (Gale et al., 2010), UOW has developed a program that inspires and enables rural university students to "pay it forward". We wish to share with international rural schools and universities our stories of success and challenges in developing rural education partnerships and promoting student progression, and to learn from others and bring international knowledge home.

*Regional Universities Network 2017; ** .id the populations experts 2016

Wednesday, August 1
4:00 - 5:30

SUB Ballroom C

Theme: Partnership

4:00-4:30 ***The Value of Rural School/Community Partnerships***
 Steven L. Johnson, Lisbon Public Schools

The presentation is about the work of the Rural Schools Collaborative in the areas of rural teacher corps, place-based education, rural school/community partnerships, and community/school based philanthropy opportunities. The session will concentrate on creating positive relationships with schools and the local community. Rural districts are as diverse as the communities they serve. Still, rural school districts have common themes: community hubs, student participation and ownership, center for arts/activities and catalysts for much of our economic growth. Successful rural teacher corps programs in Alabama, California, and Missouri will be presented. Place-based education encourages teachers and students to use the schoolyard and community places into classrooms. What is the role of our youth in our rural communities? Community-based philanthropy presents real economic development possibilities for our small rural towns and schools. Educators need to strengthen the bonds between the school and communities they serve to survive.

4:30-5:00 ***Appalachia Rising***
 Jeff Hawkins & Dessie Bowling, Kentucky Valley Educational Cooperative

The Kentucky Valley Educational Cooperative (KVEC) is comprised of 22 rural Appalachian public school districts. KVEC serves over 50,000 students and 3,000 educators through an intentional focus on Teaching, Leadership and Learning. The powerful work taking place in our rural region has impacted educational practices across the nation as evidenced by the multiple partnerships and collaborations currently underway and is contributing to the resurgence in educational achievement in Appalachia.

KVEC's overarching mission is to lead and direct sustainable systemic improvement that drives education reform and improves student achievement through innovation in systems design, resource use, and human capital development. There are three broad aims that guide KVEC's work: building agency (including autonomy, mastery, purpose), inspiring hope and fostering trust in self and others.

KVEC actively engages a unified network of schools committed to: putting students first with a willingness to share resources and strategies across school/district boundaries, developing/maintaining the capacity to engage broad cross-sections of the community in a systemic process for positive change, and the drive to recreate the landscape of rural education.

The interactive presentation will include information and context for the range and scope of initiatives and strategies that work together to build a regional system of fulcrums and levers that, when combined, can lift a community and a region. Presentation components will include: micro-investments in Innovation, FIRE Summits (Forging Innovation in Rural Education), Professional Action Networks, theholler.org (a place-based social learning network), Building it Forward (Tiny House Initiative), Community Share (on-line community engagement strategy), etc.

5:00-5:30 ***Rural School Partnerships: Connecting Improvement Science, Collective Impact and Place Based Education***
 Brad Mitchell, Battelle for Kids, Danette Parsley, Education Northwest & Kristina Hesbol, University of Denver

Rural schools face unique improvement partnership challenges regardless of format - networked improvement communities, research and practice partnerships, innovation collaboratives and/or collective impact frameworks. The presenters have rich experience in working effectively with rural schools across all these improvement formats. Based on both practical experience and related research, the presenters will highlight effective strategies and processes for scaling and sustaining efficacious school improvement partnerships. Specifically, the presentation will focus on:

- Networking: What network strategies and processes optimally connect and develop improvement efforts across rural districts and schools?
- Leading: What capacities and supports do rural partnership leaders need to be successful?
- Impacting: How do participating schools and districts "scale down" improvement efforts that make a real difference?

The presentation will center on a partnership framework that blends improvement science, collective impact and place based education design principles and practices with real life examples from around the world.

Wednesday, August 1
4:00 - 5:30

SUB Ballroom D

Theme: Profession

4:00-4:30 *Geographic and Methodological Gaps in U.S. Rural Education Research*

Jesse Longhurst, Southern Oregon University, Michael Thier, University of Oregon, Phillip Grant, Jr., University of West Georgia, Sheryl D. Craig, University of Oklahoma, & Casey Jakubowski, University at Albany: State University of New York

Geographic locale, specifically rurality, is a consequential, albeit severely understudied, predictor of U.S. students' social and educational outcomes. Problematically, policymakers and researchers often treat rural settings monolithically, failing to consider regional nuances that distinguish amongst them and diversity that exists within them. Through a comprehensive and systematic literature review, we set out to look for geographic and methodological patterns and gaps in the research.

Our study aims to understand how adequately rural education research findings reflect regional and state-level variations in rural contexts. Unfortunately, no one has comprehensively mapped where rural education research has been conducted. We also interrogated how (and if) rurality is defined in the literature. Definitions of rural vary widely; U.S. federal agencies alone use more than 20 definitional schemas for geographic locale.

We asked: 1) What locations and participants are included and excluded from studies of education in U.S. rural locales? 2) How do explicit and implicit definitions of rurality potentially obfuscate implications that can be drawn from studies of rural education in the US?

Our preliminary findings are that rural education research in the United States is most commonly conducted in the Midwest and in Appalachia. Severely underrepresented areas include the Mountain West and the Pacific Northwest. Our preliminary data analysis also indicates that there is a dearth of studies that explicitly define "rural" in their research settings in even the most basic terms.

4:30-5:00 *Place Matters: Review of the Literature on Rural Teacher Education*

Tom Schram, Kathryn McCurdy, Tom Higginbotham, & Dan Lord, University of New Hampshire

Through a review of 97 peer-reviewed articles on rural teacher education published between 2007-2017, we examine how "place" and "rurality" are conceptualized, operationalized, and investigated in the literature. Our conceptual framework builds upon the fundamental notion of place as a pedagogical construct (Gruenewald, 2003) and posits context as something that is "worked" and "worked within" by those who inhabit it and by those researchers who seek to understand its role in rural teacher education. We first analyze "how place matters" in the posing of questions and the shaping of priorities relative to the preparation, support, recruitment and retention of teachers for rural places. In doing so, we highlight distinctions between problem-based, practicum-focused, and place-conscious approaches, including how researchers can work between categories to draw on conceptualizations of place as both generalized rural space and place-specific within the same project. We then analyze how scholars operationalize and investigate place and/or rurality through a review of the empirical literature on rural teacher preparation. We find that researchers tended to investigate questions related to preparation, professional learning, recruitment and retention in and for rural places through analyses of specific programs and experiences, with limited attention to the relationship among these components or to broader initiatives. Overall, our review invites consideration of how nuanced synergies among social capital, identity, and culture contribute to understandings that bring to bear a place-specific paradigm in the preparation of teachers for rural settings. We conclude by offering recommendations for future research.

5:00-5:30 *Conversation as Method: Toward a More Rurally Attuned Methodology*

Nick Kleese, University of Minnesota

In the introduction to *Doing Educational Research in Rural Settings* (2014), Michael Corbett calls on young scholars of rural education to "develop more theoretically attuned methodologies" (1) that honor rural ways of living and learning. Coladarci (2007), in his editorial "Swan Song", echoes the need for rectify "methodological and substantive shortcomings" (1) in rural education research. However, in their attempt to avoid essentializing rural peoples and research methodologies, neither scholar discusses particular methodological approaches in depth. Similarly, they avoid prescribing specific research methods. While other writers have argued for reciprocal research relationships between researcher and participant in rural research (Kvalsund and Hargreaves, 2014; Brann-Barrett, 2014; Eppley and Corbett, 2012), these writers do not directly recognize the ways in which reciprocity can be practiced as method. Drawing on indigenous scholars Kovach (2009) and Wilson (2008), as well as my own observations and experiences conducting formal research as a rural insider, I argue that conversation as method not only fulfills the call for reciprocity, but also allows participants to share their experiences in more authentic contexts. As a form of narrative inquiry, this method allows research to occur spontaneously, organically, unmediated by the alienating, metrocentric (Corbett, 2007; 2014) trappings of academic research—and yet, for all of the allowances conversation as method offers, it also violates many accepted norms of academic research, thus rendering it difficult to pursue with institutional endorsement. This presentation explores the benefits and limitations of conversation as method and attempts to continue the ongoing development of rurally attuned methodologies.

Wednesday, August 1
4:00 - 5:30

SUB Room 233

Theme: Leadership

4:00-4:30 ***Building Leadership Capacity for Scaling Innovations in Rural School Districts***
Hobart Harmon & Thomas Butler, Appalachia Intermediate Unit 8

School district leaders seek to implement educational improvements that support change, including requirements of the new federal ESSA law (e.g., interventions with evidence of effectiveness). But few interventions are developed specifically for rural contexts. Consequently, leaders struggle to scale-up interventions that offer important benefits for rural students, schools and communities. We will describe how a Pennsylvania educational service agency (ESA) is building capacity with and for its 35 school districts to address this leadership challenge.

Intermediate Unit 8 (IU8) is establishing a process whereby IU8 and leaders of school districts, schools and communities partner in discovering, promoting and scaling customized solutions that impact student learning opportunities and success. The process is called CARE, Catalyzing Action for Responsive Education. CARE includes four steps: (1) discovery, (2) capacity building, (3) intentional place-based design of innovation, and (4) success assurance.

We will present results of a retreat with district leadership teams to be held in June 2018 that discovers their innovative policies, programs or practices as “signature candidates” for placement in the IU8 innovation lab. Selected candidates go through an incubation period, with a learning network of participating school districts using a design-based implementation (DBIR) process to make the innovation most adaptable for scale-up in the rural IU8 region.

Implications include: school districts able to lead change that serves students and communities well, scale-up of rural-appropriate innovations, micro-credential to recognize innovative leaders, IU8 Innovator’s Academy to support micro-credentialed leaders, and potential model for ESAs in U.S. and other countries.

4:30-5:00 ***How the Sausage Gets Made: Engaging in the Policy-Making Process***
Micah Wixom, Education Commission of the States

A common question for practitioners and researchers is understanding how they can engage with or influence the policy-making process at the local, state, or national levels. Additionally, states have seen a large amount of movement in state-level of leadership positions during the past election cycles, and are expected to see even more during the upcoming elections; this will undoubtedly affect education policies. During this session, presenters will discuss how novices to the policy-making process can engage with policymakers and the policy-making process. Attendees will also learn about the education policy landscape in the country, including governance turnover in positions like such as governors, legislators, state board of education members, and so on. Finally, presenters will provide some examples of how states are addressing education issues specific to rural issues through state-level policies.

5:00-5:30 ***Building the Advocacy Skills of Rural Leaders***
Devon Brenner, Mississippi State University & Susan McClelland, University of Mississippi

The purpose this session is to present lessons learned during the 2017-2018 Mississippi Education Policy Fellowship Program (MSEFPF) about building capacity for rural leadership and rural education advocacy. MSEFPF, designed by state coordinators in collaboration with the national Institute for Education Leadership, was a year-long convening of education stakeholders who engaged in the study of rural education policy issues (e.g., teacher shortages), prepared for and met with state and federal elected officials, honed communication skills, and participated in a variety of advocacy learning opportunities (e.g., role plays, panel discussions with stakeholders, etc.)

The session will be presented by both a program coordinator and program participant, who will describe the fellowship and its impact on rural education leaders in Mississippi. Data are drawn from the 17-18 cohort of MSEFPF and include descriptions of each days’ session (e.g., plans, coordinators’ notes) as well as participants’ written feedback (e.g., surveys, follow-up interviews).

Findings suggest that the EPFP model built understanding of policy processes and strengthened education leaders’ ability to advocate for rural education. Participants built relationships with state policy makers and valued the networks of advocates they built.

MSEFPF has implications for others who wish to support education leaders’ ability to engage in the important work of advocating for rural education. State and federal policy often fails to address the unique needs of rural schools. Rural educators must learn to advocate for education policy that recognizes the strengths of rural communities and accounts for the realities of rural schools.

Thursday, August 2
10:30 - 12:00

SUB Ballroom B

Theme: Partnership

10:30-11:00 ***Rural Stakeholders and Research-Practice Partnership Involvement***

Elizabeth Wargo, Davin Carr-Chellman & Kathy Canfield Daviss, University of Idaho, & Kathleen Budge, Boise State University

This study provides an in-depth look at research-practice partnership (RPP) design elements stemming from the first portion of a three-year cooperative school improvement project between rural school districts in a Rocky Mountain state, a Western state land-grant university, and a second large state university. Using in-depth focus groups (sondeos) (Butler, 1995), sustained observation (Barley, 1990), and document analysis the data reveal promising design elements which include: building and accessing professional capital, opportunities to include key change agents, and cross-system stakeholder perspectives. Findings indicate small and rural school RPP progress and outcomes are complexly woven into the tapestry of the local communities in which they serve. The primary implication for RPP design is the centrality of involving rural stakeholders.

11:00-11:30 ***Integrating Rurality in Teacher Preparation***

Joe Hicks, Kristofer Olsen, Allison Wynhoff Olsen, Montana State University & Danette Long, Northern State University

Given deficit orientations of rurality, we feel urgency to disrupt these perceptions and explore opportunities for our pre-service teachers (PSTs) to work in and with rural schools/communities. This research investigates two iterations of rural practicum experiences in the mountain west, across two cohorts of secondary English majors: 12 in the first cohort and 5 in the second. Our research questions include: 1. How do PSTs experience community during a rural intensive experience? 2. How is pride made visible in schools and in the towns? 3. How do PSTs connect to said pride? 4. What were the differences between cohort 1 and cohort 2 in PSTs' experiences with community and pride in one's community during two iterations of rural practicum?

Our method is informed by narrative inquiry and qualitative research. Our data corpus consists of PSTs' before, during, and after narratives; reflection pieces; section one of the Teacher Work Sample (TWS); photographs from the rural practicum experience; and focal interviews. Findings from the first round of data collection indicate a level of pride in rural schools and the larger community, and three distinct categories of community (peer-to-peer pre-service teacher community, rural community, and collegial community). In the second round, we noted a shift in both school and community pride and the categories of community [both will be explored in this presentation]. Another finding also holds key significance for this work: Across both practicum iterations, PSTs' expressed increased desire to continue in rural environments for student teaching or early career employment.

11:30-12:00 ***Different Strokes: Different Spokes for Different Folk***

Brian O'Neill, Calen District State College, AU

This presentation examines one small rural school's partnerships with community organisations and industry to provide learning opportunities for students. The program involves components (or spokes) such as Mechanics Matter which involves students working with the apprentice coordinator from Cummins South Pacific, a diesel motor company; Radio Rocks which involves students presenting programs on community radio and achieving a qualification; SUN Students which involves senior secondary students completing up to five university subjects while they are still at school. As these courses are offered on-line, they are ideal for students in rural and remote schools. The school's partnership with the local police station has seen the school students constructing the new counter in the police station and a local police officer run gym workout sessions in the school's gym.

The Mechanics Matter students are always successful in obtaining apprenticeships; the Radio Rocks students have transitioned into careers in public relations, the Arts, Journalism and radio presenting. Over half of our senior cohort generally now transition to university study in such diverse fields as Accounting, Business, Engineering, Journalism, Law, Medical Imaging, Nursing, Pharmacy, Physiotherapy and Teaching.

The program has been awarded - an Australian Rural Education Award (2011), Regional Showcase Awards of Excellence and was a State Finalist in the Showcase Awards and the school was acknowledged as the number one school in Queensland in terms of senior students' outcomes and in meeting senior students' needs.

Thursday, August 2
10:30 - 12:00

SUB Ballroom C

Theme: Profession

10:30-11:00 ***Making (and Keeping) Resilient Educators***
Jennifer Lutey & Tina Hamilton, Brightways Learning

Research shows there's a correlation between a school's support for their educators and their job performance, satisfaction, and retention in the district. But what does that "support" look like? Join us to discover how you can advance educator resiliency by reflecting on an educator's "Web of Support" inside and outside of school, including that Web's dynamic balance.

11:00-11:30 ***Reaching Rural Mathematics Teachers: Effective Strategies for Online/Blended Professional Learning***
Jennifer Luebeck, Montana State University

The need for professional learning inclusive of rural K-12 educators fuels the STREAM project's six-year effort to design, offer, and investigate a successful model of online/blended learning (OBL) for mathematics teachers across Montana, where 75% of schools and teachers are rural. The model attends to five elements of Desimone's "core conceptual framework" for effective professional learning (2009, p. 183): a focus on content, active learning, coherence, adequate duration, and collective participation. STREAM workshops and online modules feature standards-based and domain-specific mathematics content knowledge. As active participants teachers solve rich mathematical tasks, examine student work, analyze instructional videos, and create standards-based lessons using carefully vetted materials that maintain coherence with district curriculum. Adequate duration is assured over months of blended learning, while opportunities for shared reflection and comparison encourage collective participation in a learning community.

Central to the STREAM curriculum are over 20 three-week online modules, each targeting a cluster of mathematical concepts or a learning progression spanning several grades. Each week teachers complete two or three tasks that explore important concepts in mathematics, examine evidence-based practices, introduce Web-based resources, or ask them to investigate their own classrooms and students. Solutions and reflections are communicated in discussion forums with feedback from peers and instructors. We will describe the STREAM module structure, demonstrate exemplar tasks, and discuss teacher outcomes. The STREAM curriculum provides a template for online/blended professional learning that can be replicated for rural educators anywhere, as well as other teacher groups challenged by limitations of time, money, distance, and isolation.

11:30-12:00 ***Rural Teacher-Leader Professional Development for English Learners in an Anti-Immigrant Climate***
Maria Coady, University of Florida

Ongoing teacher professional development (PD) is a cornerstone of education across the US. However, teacher and educator PD programs that aim to support immigrant English Learners (ELs) face the added challenge of a sociopolitical climate and anti-immigrant rhetoric. We describe one rural educator teacher PD program and the challenges faced in the current context. Using a framework of critical consciousness, we describe how the program was transformed from one to prepare teacher-leaders to one that aimed to include and address issues of equity and justice. We also describe the transformation of a parent engagement component of the PD that prioritized the lived experiences of immigrant EL parents.

Thursday, August 2
10:30 - 12:00

SUB Ballroom D

Theme: Practice

10:30 -12:00 ***Innovative Approaches to Improving Rural Students' Achievement: Interventions for Personalized Learning in Middle School, Social- Emotional Learning in 9th Grade, and Writing in Secondary Schools***

Richard Kitzmiller, Niswonger Foundation, Susan Savell, Building Assets, Reducing Risks (BARR) Center, Rachel Bear, National Writing Project, & Casey Olsen, Columbus High School, National Leadership Team College, Career, and Community Writers Program

Facilitator: Victoria Schaefer, Westat

The U.S. Department of Education presently funds the Education Innovation and Research (EIR) Program and previously the Investing in Innovation (i3) grant program to encourage and support innovative approaches to improving student achievement in U.S. schools. The program prioritizes a variety of topics ranging from college and career readiness, to social and emotional learning (SEL), to working with rural districts and schools. Three grantees with proven results share brief overviews of their work and then discuss the commonalities across their work that created the positive results for students. All grantees work in secondary schools; two projects are national in scale with positive results, and one is regional (Appalachian) and is new. The grantees' areas of focus are writing, literacy, and SEL.

Thursday, August 2
10:30 - 12:00

SUB Room 233

Theme: Students

10:30-11:00 ***"Gaming" the Transition to Post-secondary Education***
Tricia Seifert, Montana State University

The challenge in many rural communities is less on students failing to graduate from high school but in the number of students who pursue some form of post-secondary education, despite the well-documented wage premium of college graduates compared to those with a high school diploma (Mayhew, et al., 2016). In a recent article, a student from rural Iowa summed up the post-secondary pursuits of his peers, "There's just no motivation to go" (Markus & Krupnick, 2017). This student's insight is bore out by a host of research studies using state and US national data (Irvin, et al., 2012). Students from rural areas, many of whom feel pressure to maintain the family farm or ranch, are reluctant to leave their communities. They may experience conflicting messages regarding the value of continuing their education (Byun, et al., 2012) and/or feel lost in the academic jargon inherent in the application and admission process (Ardoin, 2013). Researchers found Montana high school students have a host of questions and concerns regarding the post-secondary transition, spanning from paying for college to making new friends (Oliveri, Funke, Clark, & Seifert, 2018).

In an effort to respond to students' questions and address their concerns, Dr. Seifert and her team have developed a college transition board game that simulates the first semester of college. Through game play, high school students develop their "college knowledge" by learning time management, the people and programs that exist to support their success in their first year, and the norms and values of college (often referred to as the "hidden curriculum"). Gaming the first year of college draws on the power of gaming for educational purposes. Rather than telling students what they need to know, students play. They fail. They play again, learn and advance in the game. For those who game, this is the process of "leveling up." The college transition board game prepares high school students to make a more seamless transition because they are not experiencing common first year of college situations for the first time when the consequences are real. They have confronted these situations and learned first in a game setting, where they can test out different decisions and see the results. This session will introduce attendees to the board game and share feedback gleaned from play testing with high school students in 13 rural Montana communities.

11:00-11:30 ***Rethinking Distance Education and ICT Use: Advancing Arguments of Access to Quality Teaching & Learning***
Natalie Downes & Philip Roberts, University of Canberra

Distance education facilitated by ICT is increasingly recognised as having a crucial role in supporting the schooling of students in rural and remote regions. However, the technological infrastructure and "access" is often conflated with the learning method. In this logic connecting students to school subjects and resources they can't readily access in their community is positioned as the most effective (and cost effective) solution to overcoming the limitations imposed by isolation. In this paper we argue that the focus on "access" is limiting the potential of distance education and ICT use, whilst fundamentally changing the nature of education in rural, regional and remote communities. From a theoretical perspective online access to the curriculum changes the nature of the curriculum and educational interaction. Such that the learning relationship between teacher and student risks being redefined into content transmission and content mastery. It is not certain that the curriculum is designed from this perspective, and that this rearticulation enhances student learning.

To demonstrate these issues we draw on Australian examples constituting a document analysis of some key education policy documents, distance education literature in an Australian rural education research journal, and an ethnographic study of distance education parent supervisors. In the policy documents and journal literature, the focus is on the provision of access to resources and experiences and using these methods to overcome perceived rural disadvantage. However, the experiences of parents supporting their students in distance education indicate that it is important to consider the nature of teaching and learning that takes place. Specifically, their experiences highlight the importance of ensuring that teachers working with students from a distance are able to create contextually relevant learning experience using ICT technology. These contradictions highlight that it is necessary to look more closely at the nature of distance education to ensure the best possible system is provided for all students.

11:30-12:00 ***Understanding the First-Year Experience of Students from South African Rural Schools***
Constance Khupe, University of the Witwatersrand, Johannesburg

Historical disparities in education and other social services have continued to marginalise South Africa's rural communities. Access to higher education for rural students does not guarantee success. In 2014, the University of the Witwatersrand revised its admissions policy for Health Science degrees as part of continuing efforts to achieve a student population that demographically represents South African society. The new policy allows for up to 40% enrollment from rural and other low-resourced schools (QQR). This paper shares insights into the university experiences of QQR students and implications on university efforts to be "student-ready". This paper is part of a broader transformative participatory research study involving understanding QQR students' university experiences, and designing interventions that are rooted in transformative learning theory (Dirkx, 1998; Mezirow, 1997, 2000). The data for this paper were collected through semi-structured questionnaires designed to establish QQR students' baseline information. Because of the difference between home/school circumstances and that of the university (e.g. social, language, finance, learning resources), QQR students experience difficulties transitioning into university. Securing funding, being in university residence and engagement in social activities contribute to quicker settling in. Academic challenges mainly stem from little experience with university teaching methods, language of instruction and use of computers. QQR students make helpful suggestions on the focus areas for academic development interventions. Providing access is an important first step a university can take in serving students from QQR schools. Student success is enhanced when protective factors of finance, accommodation and appropriate academic development interventions are in place.

Thursday, August 2
3:30 - 5:00

SUB Ballroom B

Theme: Profession

3:30-4:00 ***A New Model of Teacher Education for Small Island States: The Nauru Teacher Education Project***
Neil Taylor & Penelope Serow, University of New England, AU

The remote Pacific Island nation of Nauru is the smallest republic in the world. It is a tropical island with an area of 21 square kilometres (8.1 square miles) and a population of approximately 11,350 residents. It sits 61 kilometres south of the equator and is 4 hours flying time north east of Australia. Throughout the 1970 and 80s, royalties from phosphate mining on the island resulted in Nauru experiencing an extremely high per capita income, however, education was largely neglected and when funds from mining declined, the education system in Nauru was suffering from a lack of local teachers with the shortfall being made up by expatriate teacher mainly from Fiji. To address this, in 2012 the Nauru Government called for tenders to establish teacher education program and the University of New England was awarded the Nauru Teacher Education Project. The project involves on-line study with support from two on-island tutors and is unique to small island states. It allows students, of whom many are female with large families, to study without leaving the island. Implemented in 2013, it has been running successfully in often-difficult circumstances and to date 33 students have graduated with an Associate Degree in Education (Pacific Focus) in primary and secondary education. Upon graduation these teachers entered the school system but a number have opted to continue studying part-time for a full BEd. This presentation outlines the project conceptualisation and establishment and reports on a significant amount of associated research that informs its ongoing implementation.

4:00-4:30 ***Place-based Rural Teacher Education in Scotland***
Morag Redford, University of the Highlands and Islands & Anne Patterson, Argyll and Bute Council (Scotland)

This paper presents an analysis of the role of place in the recruitment and retention of primary teachers through a one- year teacher education programme in the University of the Highlands and Islands (UHI). UHI is a federated institution covering North and West Scotland. The teacher education programme is delivered locally to small groups of students in seven colleges: with online sessions in the university virtual learning environment, video conferencing and face to face workshops alongside school- based placements. In this paper we present the outcomes of two inter-linked studies. The first programme-based, where we followed three cohorts of students in Argyll College UHI (2015 - 2018) into their induction year placement and employment as a rural teacher in Argyll and Bute. The research methods were informed by the teacher agency framework (Priestly et al, 2015) underpinning the programme and an ethnographic methodology with data collected from participants at different points in their journey. The outcomes suggested that while the programme gave students the pedagogical skills to teach in small schools (4 -20 pupils) it did not explore the role of place in the curriculum and wider school community. The second study (2017 - 18) worked with the 2015 - 16 graduates in their induction year as a primary teacher and explored through a series of interactive workshops and individual interviews their 'responses' to place and how they taught and lived in rural communities. The outcomes from both studies have informed national practice in initial and continuing teacher education in rural Scotland.

4:30-5:00 ***Systemic Recruitment and Retention of Rural Educators***
Harvey Rude, Colorado Center for Rural Education at the University of Northern Colorado

The Colorado Center for Rural Education (CCRE) was established in 2016. The Center convenes rural education agency partners to implement various pipeline projects to support the identification of rural educators, connects educator preparation program providers with regional rural school district partners to create innovative pathways for preparation, and builds capacity of regional partnerships to ensure sustainability.

This descriptive study provides outcome data regarding ongoing projects: Rural Teaching Scholars stipends for student teachers placed in rural school districts; Concurrent Enrollment Educator Qualification (CEEQ) and National Board Teaching Certification (NBTC) scholarships, and University/Rural School District Partnership mini-grants. The outcomes from these projects include the numbers of additional educators who elect to practice in rural school districts and the numbers of rural educators who commit to continue their practice in rural school districts. A variety of demographic and contextual variables are addressed in the analyses.

The Center has awarded 99 Rural Teaching Scholar stipends, 22 NEEQ and NBTC scholarships, and 7 University/Rural School District Partnership mini-grants to date. Preliminary findings will be shared that include the impacts on alleviating educator shortages in the state of Colorado.

Over the past six years, Colorado schools have experienced 15% growth in numbers of students being educated while the number of educators being prepared by educator preparation institutions has declined by 25%. The CCRE supports a variety of recruitment, preparation, and retention projects and activities designed to address the critical shortages of educators in rural school districts across the state of Colorado.

Thursday, August 2**SUB Ballroom C****Theme: Practice****3:30 - 5:00****3:30-4:00 *Successful Writing Instruction in a High Poverty Middle School in the Era of Standardized Writing Assessment***

Heather Fisher, Montana State University

Due to the importance of writing and the lack of proficiency nationwide, further research to inform practice is necessary. Unfortunately, the depth of writing research is limited, particularly at the middle grades where students are at a pivotal point in their educational careers. Therefore, this sequential explanatory mixed methods study was designed to identify patterns of writing proficiency across Montana's middle-grade students and explore successful writing instruction for students who historically struggle. The focus of this presentation will be the second phase, where qualitative data were gathered from a Montana middle school where students achieved proficiency on the Smarter Balanced Assessment English Language Arts Performance Task to examine the way writing instruction is approached in the school. From the teacher's perspective at the case study school those results are attributable to several areas: relationships (students and teachers), student motivation, which is based on relationships, engagement (tech, topic, authenticity), and extrinsic rewards, co-teaching, and standards-based teaching and grading. Several recommendations in the areas of administrator and teacher practice emerged based on the study.

Findings offer a holistic picture of a contextually responsive system of writing instruction that resulted in positive outcomes for students and illuminated four systemic factors that may contribute to their success: the role of co-teaching, the rules of standards-based classrooms, the community of students and teachers, and the tools of engaging writing instruction. The significance of the exploration was that it could inform an understanding of how teachers influence writing outcomes with diverse populations.

4:00-4:30 *Instructional Planning Practices of Rural, Multi-grade Teachers: A Case Study*

Kristi Borge, Polaris School

Multi-grade teachers must consider numerous factors when planning for instruction. The challenges of meeting content standards for several grade levels, teaching numerous subjects, and managing student behaviors contribute to a complex process. The purpose of this study was to investigate the methodologies used for long and short-term instructional planning in multi-grade classrooms, including organization of students and subject areas. Qualitative case-study research was conducted on three rural Montana teachers who teach multiple grade levels. Interviews, classroom observations, and planning documents were used to construct descriptions of the participants' yearly, unit, weekly, and daily planning. Goals of planning, resources used, planning formats, evaluation of planning effectiveness, and alignment to planning models were also compared. The multi-grade teachers relied on previous plans, knowledge of students, and curriculum guides as primary resources to meet their planning goal of effective content coverage. Notable differences existed in planning format, organization of instruction, and use of curricular integration between the least experienced teacher and more experienced teachers. Teachers also relied on executive planning routines to manage their planning duties. The teachers' planning strategies could be applied to general education settings as a model for differentiating instruction for diverse student populations. Additionally, pre-service teacher education programs could benefit from adding courses focused on realistic planning methods rather than theoretical models. Finally, multi-grade teachers could benefit from peer-mentoring programs and structured opportunities to share and reflect upon their own practices.

4:30-5:00 *Teacher Inquiry and Innovations Across Rural Contexts*

Elizabeth Reieron, Miles City High School, Allison Behrens, Whitehall Middle and High School, & Catherine Dorian, Fort Benton Schools

The purpose of this presentation is to highlight pedagogical innovations developed by secondary English teachers across different rural contexts in the state of Montana. Drawing upon Teacher Action Research methodologies, these presentations, in addition to offering snapshots of the curricula developed, explain the processes whereby teachers identified issues in rural education, set about investigating these issues, and then developed and implemented curricula to address them. All of these projects address issues of equity, representation, and critical place-based pedagogies. Outcomes include increased student engagement and achievement--both in the new and the traditional curricula--as well as improved school-community relations. Across these projects, the teachers demonstrate how drawing on rural funds of knowledge makes space for them to innovate and personalize their curriculum for 21st century rural youth. Thus, a key significance of this work is that these teachers and students are building narratives of current-day ruralities that help reshape deficit-oriented renderings of rural peoples, schools, communities, and ways of life. In these ways, this presentation provides the audience with a range of ways to see and imagine the nexus of theory and practice involving rural education, including how social justice literacy education might happen within rural contexts.

Thursday, August 2
3:30 - 5:00

SUB Ballroom D

Theme: Students

3:30-4:00 ***Retention Policy, Direct Certification, and Rurality in Georgia***
Kate Caton, Georgia State University

Student retention is a major factor impacting student success both during and after the course of their academic career, with any widespread short-term gains offset by long-term adverse effects experienced by vulnerable student populations (Huddleston, 2014). This study examines differences in retention rates and policies across public school districts within Georgia. The districts will be grouped by locale type (rural, town, suburb, city) and stratified into three subgroups based on per-student spending; three districts will be randomly selected from each stratum, for a total of 24 districts. An analysis of covariance is used to analyze the dependent variable of retention rates with the percentage of directly certified students in the district used as the controlling variable. Directly certified students are those who live in a family receiving SNAP and/or TANF benefits, and/or those who have been identified as transient, homeless, foster, or migrant students, and is increasingly being used as a proxy measure of socioeconomic status (gosa.georgia.gov). Preliminary analyses indicate that while some rural districts may comparatively experience low retention rates, rural districts experience the greatest within-group variability for retention rates. The two districts with highest and lowest retention rates in each of four locale types are identified for the 2016-2017 school year, and their policies compared to the Georgia statewide policy and each other to determine similarities or differences. The qualitative data collected will aid in determining whether any patterns of retention uncovered in the quantitative data are due to differences in district policies or implemented practices.

4:00-4:30 ***What Do Your Parents Make? The Overriding Effect of Socioeconomic Status for Rural Students***
Phillip Grant, Jr., University of West Georgia

Rural students in the United States experience higher education differently than students from non-rural areas. This presentation explores how socioeconomic status can have an overriding effect that boosts the rural student experience in institutions of higher education. The data from this presentation comes from a broader case-study analysis of 18 rural students at the University of Georgia, an R1 university in the Southeastern United States. The study aimed to understand the rural student experience in college through the lived experiences of students.

The presentation will explore how socioeconomic status benefitted students in the form of academic, cultural, and economic capital. The researcher does not argue that socioeconomic status is more important than rural status, but rather that traditional rural students experience higher education differently, according to their parents' means.

4:30-5:00 ***Rural Adolescents' Educational and Occupational Values: Are They Different and Do They Matter in Young Adulthood?***
Sarah Schmitt-Wilson, J. Mitchell Vaterlaus & Ashley Beck, Montana State University

Rural students' educational and occupational attainment are related. Many factors influence attainment in these areas for rural students such as socioeconomic status, high school achievement, resources available in rural schools, parental expectations and educational attainment, exposure and proximity to post-secondary institutions, and the careers available in local communities. As the 2016 U.S. presidential election highlighted stark value differences among residents living in urban, suburban, and rural communities, it is worthwhile to examine the values of rural adolescents and how they relate to young adult educational and occupational outcomes.

This study incorporates ELS:2002 (N=16,200), a longitudinal study of adolescents and young adults in the United States, to examine rural adolescents' educational and occupational values in an attempt to answer the following research questions. What are the educational and occupational values of rural adolescents? Are the values (educational and occupational) of rural adolescents significantly different from their urban and suburban counterparts? Furthermore, do educational and occupational values in adolescence relate to educational and occupational attainment in young adulthood?

Results of weighted descriptive analyses suggest that rural adolescents feel that being an expert in their field of work and getting a good education are important. Moreover, results of weighted ordered regression analyses suggest differences in values of getting a good education and being an expert in the field of work between adolescents growing up in rural and urban communities. There were no significant differences between suburban and rural adolescents. Based on these preliminary findings, we will conduct weighted regression analyses to examine if the value of education/being an expert in the field of work predicts educational/occupational attainment in young adulthood.

This research has the potential to enhance our current understanding of rural students' educational and occupational attainment by exploring how adolescent values relate to young adult outcomes.

Thursday, August 2
3:30 - 5:00

SUB Room 233

Theme: Leadership

3:30-4:00 ***Who Ya' Gonna Call? Ghostbusters or Mentors?: Mentoring for New Rural Principals***
Brian O'Neill, Queensland State P-10/12 School Administrators' Association, AU

The Queensland State P-10/12 School Administrators' Association was established to support the eighty-three dual sector schools in Queensland. Eighty percent of these schools are relatively small and are located in rural and remote communities. While many of these schools' principals are generally experienced, their experience is restricted to only one sector - only primary or only secondary.

Recognising the need to support these instructional leaders, the association has established informal and formal mentoring programs and a well being program. The association's mantra or slogan is "Quality education in P-10/12 schools through excellence in leadership." While the informal mentoring program is designed to assist principal in their P-10/12 schools, especially the recently appointed ones, the formal program is designed to prepare aspiring P-10/12 principal to better prepare them prior to application and subsequent appointment. Major components in this program are exploring community and industry partnerships, leadership of dual sector schools and a focus on the sector in which the aspirant feels a deficit.

Research has shown that the quality of a school's leadership has a profound impact on the quality of education and student outcomes in schools. The association's support programs therefore are important in providing support to P-10/12 principals on their leadership journey and in developing their sense of their well being.

4:00-4:30 ***Growing Success: The Need for Rural Schools to Collaboratively Succession Plan to Grow and Sustain Their Leadership Pipelines***

Lora Wolff, Western Illinois University & Michaela Fray, Quincy Public Schools

In 2013, a USDE grant was awarded to three high-need school districts and their university partners in Illinois. Through this grant "called the Illinois Partnerships to Advance Rigorous Training (IL-PART), these universities/districts piloted an intensive full-time/full semester-long internship model that provided a longer duration of full-time, job embedded experiences. The full-time, full-semester internship has proven to be a more cost effective and replicable strategy than the full-year, full-time internship model used by several principal preparation programs.

Not all the principal candidates participated in the full-semester internship and instead opted to do the traditional internship. An evaluation of the grant is studying the extent of differences between the two internship models by tracking outcomes during both the pre-service phase and after graduates are hired into principal positions.

This presentation will report on three years of evaluation results on fidelity of implementation, program satisfaction, and lessons learned. The presenters will share data results and practical strategies for rural districts regarding:

- Utilizing this model for successful succession planning to sustain the principal pipeline
- New teacher evaluation requirements and aligning the full-semester internship during off-year teacher evaluation cycles
- Identification and placement of quality substitute teachers to avoid negative impact on student learning
- The Affordable Care Act and how this affects substitute teacher benefits

Documents that have been created to help message the new internship model, cost out the substitute costs for districts and retain candidates in the district after the release from their teaching duties will be shared.

4:30-5:00 ***Leadership in Community: Strengthening Rural Education***
Dawn Wallin & Paul Newton, University of Saskatchewan, CA

This presentation reports on an ongoing research study funded by the Social Sciences and Humanities Research Council of Canada that examines the role of teaching principals in rural, remote and northern schools in Canada. The research has a multi-method design conducted in four phases, but for this presentation, we report on the latest results of observations and interviews with rural teaching principals in Alberta, Saskatchewan, and Manitoba. We frame the study utilizing common frameworks of instructional leadership amidst principal leadership standards in the three provinces. Our preliminary findings indicate that teaching principals tend to equate instructional leadership with time visiting classrooms, but in fact, teaching principals engage in many other instructional leadership practices that they may not define as "instructional leadership." This presentation focuses on the effects of expectations of instructional leadership (self and leadership models) on principal self-efficacy, as well as the ways in which rural teaching principals are enacting instructional leadership in their communities through the testing and modeling of teaching and learning innovations, collaborative planning and professional growth, creative scheduling and programming opportunities, and working with community to provide learning opportunities.

Friday, August 3
10:30 - 12:00

SUB Ballroom B

Theme: Students

10:30-11:00 ***Personalized Teaching/ Learning in the K-16 Classroom***
Susan Sullivan, Montana State University

This interactive session is based on 6+ years of research with students, administrators, and staff from rural public school systems in 3 diverse states. Explicitly, the schools studied have boldly shifted away from the traditional time and text-driven method of teaching to a more fluid, self-paced model of learning identified as (CBE) competency-based education (United States Department of Education, 2014). Rural schools are the perfect incubators for this paradigm shift as CBE can/and should be individualized to meet the needs of each community whether it be in California, New York, or in any rural community abroad.

An overview of the rapidly shifting education landscape in the United States and abroad will be presented along with the stated need for this change from experts in the field of education. Participants will be introduced to the most highly recognized schools, districts, states, and countries currently developing, implementing, and/or refining their CBE paradigm shift.

Participants will actively engage with several learning tools used in CBE schools and will engage in an interactive survey and discussion. Information regarding the most respected publications and current trends in CBE will be available to attendees.

11:00-11:30 ***Developing a Rural Educator Self-Identity: A Pre-Service Teacher Early Field Experience***
Beth Kennedy, Hailey Buckley & Alex Hardy, Montana State University

Addressing rural teaching recruitment and retention needs requires an innovative approach. Providing pre-service teachers with an opportunity to develop a first-hand awareness and understanding of the rural community context serves as a promising start to addressing this complex challenge. During late spring 2018, a cohort of pre-service teachers enrolled in an integrating educational technology course participated in a pilot "Tech Club" early field immersive experience in central Montana. Such an arrangement provided an opportunity to connect theory to practice in a variety of rural settings. Participants worked closely with university field supervisors, school administrators, and classroom teachers across three different communities to gain teaching preparation via observation and implementation of several technology-rich lessons. As a result of this transformative experience, a number of key themes emerged related to: rural self-identity, educator growth, and community relationships. The presentation will offer additional context for the early field experience, discuss how this rural early field experience shaped them as aspiring professionals, and facilitate dialogue on possible changes moving forward to further enhance the experience for all stakeholders. Such a unique teacher preparatory practice offers new insights on how to best address the inherent challenges of both pre-service teacher preparation and rural teaching recruitment/retention efforts -- something that can be reasonably replicated in other teacher education programs to help better meet rural education needs.

11:30-12:00 ***Increasing Equity and Access in Dual Credit Programs***
Kimberly McCluskey, Scotland County R-1

Online dual credit programs have allowed small, rural schools to provide students with increased access to college-level courses in high school. However, many students in high-poverty districts do not have access to a computer or the Internet at home and often cannot afford to pay for the college credit. Discover the ways one school district in rural Missouri has increased equity and access in dual credit courses through the use of a learning lab, dual credit scholarships, and enhanced community support.

Friday, August 3
10:30 - 12:00

SUB Ballroom C

Theme: Profession

10:30-11:00 ***"Here Comes the Teacher": Being a Teacher in a Rural Community***
Unn-Doris Baeck & Outi Autti, UiT The Arctic University of Norway

The purpose of this paper is to focus on the situation of rural school teachers. Research shows that in rural areas teaching staff is typically younger and less experienced than in other locations and that teacher staff turnover as well as resignation rates among teachers are higher (Green and Novak, 2008). Through exploring how teachers in two different rural locations in Finland experience working as teachers, our aim is to shed light on the working conditions of rural school teachers, in order to contribute to a deeper understanding of the challenges related to maintain well-qualified and stable teaching staffs in rural schools.

The analyses are based on qualitative interviews with primary school teachers in two different rural locations in the northern part of Finland. The analyses show that working as a teacher in a rural context brings with it certain challenges, which may not be present in other, more urban contexts. These challenges are not necessarily connected to the work that takes place inside the classroom, but also have to do with the expectations and demands that the teacher role implies in rural communities. Our findings indicate that rural school teachers encounter experiences that may affect their ability and motivation to work as school teachers. Consequently, this may influence their ability to create fruitful learning environments for the students. The data analyses also indicate that teachers employ different strategies in order to cope with the expectations and demands that they experience. For some, withdrawal from the local communities is considered a necessary coping strategy.

11:00-11:30 ***"This is a Rural Activity": An Activity Theory Perspective on Rural Classrooms***
Meredith McCool, Sweet Briar College

Within the field of education, activity theory has been used to explore pre-service teachers' appropriation of pedagogical tools (e.g., Grossman et al., 2000; Leko & Brownell, 2011) and in-service teachers' professional development (e.g., Yamagata-Lynch, 2003; Yamagata-Lynch & Haudenschild, 2009). Up to this point, however, activity theory's application in rural education research has been minimal with respect to exploring teachers' enactment of their role as teachers in a rural context. Following a review of the literature, I synthesized the findings of several studies of rural teachers to illustrate the elements of an activity system and explore how those elements -- subject, object, mediating artifact, rules, community, and division of labor -- might manifest in a rural education context based on the extant literature. I then conducted a multi-case study of rural teachers to explore how they conceptualize and enact their role as teachers in a rural context. Cross-case analysis revealed that the subject element of the activity system provided the most insight into how these rural teachers conceptualize their role; the mediating artifact and division of labor elements of the activity system provided the most insight into how these rural teachers enact their role. Although both teachers are independent and interdependent and employ similar pedagogical tools, differences in the ways the teachers enact their role can be explained by the differences in the way they conceptualize their role, which leads them to divide the labor of teaching and learning in their classrooms differently.

11:30-12:00 ***Importance of Rural Careers Educators' Local Professional Networks***
Melyssa Fuqua, Monash University, AU

This paper reports on one aspect of a study which sought to understand the lived experiences of six careers educators in rural Victoria. It focuses on data related to participants' views of their local professional network.

The larger study suggests that careers education and guidance is under-resourced in Victorian schools, resulting in careers educators often feeling isolated and undervalued as they work to assist students to make well-informed decisions regarding their future pathways. This can be worse in rural schools where there are challenges accessing relevant professional development due to geographical distance as well as lack of opportunities and support for staff (Glover, et al., 2016). As such, the rural careers educators in this study identified their local professional network as a key resource for professional learning.

Using narrative inquiry, co-constructed narratives from each participant were analysed using Riessman's (2008) dialogic/performative analysis method. Data showed that the participants' local network was a main source of professional learning, especially for those without qualifications in careers education. It was valued for its collective local knowledge, support, involvement of community stakeholders, and for its organisation of a careers expo. Findings from the study stress the importance of enabling rural careers educators to develop and participate in professional learning networks that are contextualised and value local knowledge. Policy-makers, school leadership, and careers educators should support these networks as significant professional development opportunities.

Friday, August 3
10:30 - 12:00

SUB Ballroom D

Theme: Practice

10:30-11:00 ***Space, Place, & Mathematics: Exploring the Diverse Mathematical Knowledges of Rural and Remote Students in Australia***

Tom Lowrie, Robyn Jorgensen & Natalie Downes, University of Canberra

This talk will focus on a research project that explores the diverse mathematical knowledges of rural and remote students in Australia, and how teachers can draw on these knowledges when teaching “school mathematics”. Specifically, we focus on spatial reasoning skills because there is a proven link between spatial reasoning skills and mathematics achievement and it is known that these skills can be developed through targeted training programs (Lowrie, Logan, & Ramful, 2017). With this in mind, this project explores what a spatial reasoning training program may look like in diverse rural and remote communities in Australia, and its impact on students’ mathematics achievement.

In this project we draw on considerations of spatial geographies (e.g., Green, 2008) and recognise that place and space are influential factors in students’ learning. We recognise that the students’ spatial reasoning skills will be influenced by where they live, and their varied lives in their communities outside school. To explore this, case studies are being undertaken in rural and remote communities around Australia. Specifically, students are participating in activities that focus on their understanding and navigation of their community. It is anticipated that students’ understandings of community, and the nature and use of their spatial navigation skills in and out of school will vary.

Understanding these variations will enable the development of tailored spatial training programs that draw on the diverse knowledges of rural and remote students. With the link between mathematics achievement and spatial reasoning skills, this tailored program has the potential to address the disproportionate achievement of rural and remote students in mathematics.

11:00-11:30 ***Teaching Outdoors: A Multiple Case Study of Teachers’ Methods and Motivations Practicing School-based Outdoor Teaching***

Rose Vallor, Montana State University

The purpose of this research study was to learn how and why teachers included outdoor teaching in their classroom pedagogy. The basis for the study was that while significant research (Dillon, 2006; Malone, 2008; Rickinson, 2004) has shown the many ways students gain from outdoor education, and uncovered the issues teachers face when attempting to practice outdoor education, (Dyment, 2005), there is little research that examines the practices and motivations of teachers who successfully and consistently incorporate outdoor teaching in their pedagogy. The research design for this study was a multiple case study (Yin, 2014) of three exemplary teachers. Data collection included interviews, field observations, a demographic survey and curriculum artifacts. Data analysis shows that participating teachers developed curricula that maximized use of the attributes of each teachers’ school campus and surroundings. Further analysis indicates that teachers’ motivations stem from personal attachment to spending time outdoors, along with concern for their local environment and the environment in general. Teachers also spoke of being motivated by increased student learning and engagement, and observations of increased positive cognitive, behavioral and affective outcomes in their students. The significance of the study lies in the documented evidence of the practical methods teachers use and the deep commitment teachers have to maintaining outdoor teaching in their pedagogy. Recognition of how and why teachers incorporate outdoor teaching in their own specific circumstances can point the way to how to include outdoor teaching in rural teachers’ pedagogy.

11:30-12:00 ***Rural Education and the Need for Trauma-Informed Care***

Lauren Dotson, Montana State University

In this session, a former school administrator from a rural school district in the mountains of North Carolina shares the transformative potential of implementing a model of trauma-informed care for school and classroom discipline procedures. This session is intended to illuminate best-practices and procedures for creating a responsive, trauma-sensitive approach to school and classroom management as well as highlight the need for this approach in our nation's rural and high-poverty schools. Additionally, the presenter will also share student outcomes from a case study from a rural southwestern NC school district that recently piloted a trauma-informed care model.

This session is best suited for currently practicing school administrators, classroom teachers, or professors working in teacher preparation or educational leadership programs. “Take-aways” from this session will include increased knowledge and effects of adverse childhood experiences and physiological changes to the child’s brain from chronic stress due to traumatic experiences; it will also provide to participants both prevention and reaction techniques, if desired, which teachers and administrators may use to support students in traumatic crises as well as helping improve overall student engagement and academic/behavioral outcomes.

Friday, August 3
10:30 - 12:00

SUB Room 233

Theme: Leadership

10:30-11:00 ***A Systems Approach to Improved District Performance: Perhaps People are Not the Problem***
Ivan Lorentzen, Flathead Valley Community College & William McCaw, University of Montana

Various states have enacted various reforms aimed at improving student achievement. Some strategies replace teachers, principals, superintendents, and even entire school boards. The assumption is that district problems are people problems that require people solutions. Unfortunately, the results have been mixed at best. This session will argue that the majority of school district problems are system problems that will best respond to system solutions. A model of school organization will be presented - The Cascading Tiles Model - that more effectively holds everyone in the district more accountable for high student achievement while avoiding the disruption of dramatic personnel changes.

11:00-11:30 ***Creating a Team of Teacher Leaders in Remote Schools and Local Communities***
Allison Wynhoff Olsen, Kirk Branch, Montana State University, Alan Hoffman & Amber Henwood, Savage High School

This presentation explores the connections between teacher leadership development and a K-12 writing initiative in a rural MT school district. Four teachers across grade levels and content areas in the Savage School District in Eastern Montana collaborated with the Yellowstone Writing Project (YWP) to lead a schoolwide initiative, culminating in the May 2018 publication of *Landscapes of Savage*, a book about the community written wholly by K-12 Savage students. In the process, these four teachers took on extensive leadership challenges in their school. As one teacher leader explained, "When it's a rural school like ours, you can't just be a leader in your department; you have to step up school wide." The teachers also became full partners with other Montana teachers in YWP and provided key lessons about how better to work sustainably in rural and remote Montana schools.

Our presentation emphasizes both the process we developed - and the lessons we learned along the way - and suggests ways of replicating this in other schools, using the four teachers from Savage as leaders in consultation with other rural schools. We attend to the lived experiences of both teachers and students, using video excerpts highlighting how some of the Savage students experienced this shift in writing culture and collaboration. This project offers a way of developing teacher leaders in rural and remote schools and of inviting those teachers into a constantly growing network of Montana teachers engaged in ongoing professional development through the Yellowstone Writing Project.

11:30-12:00 ***The Role of Values In a Teacher Leadership Programme for Scottish Island Communities***
Morag Redford, University of the Highlands and Islands Scotland

This paper explores the development and implementation of a programme to support teacher leadership in the island communities of Scotland. The University of the Highlands and Islands (UHI) worked with teachers in the Orkney and Shetland Islands to develop a bespoke professional learning programme in 2015 - 16 for delivery in 2016- 17. The aim was to support teachers to explore their role as leaders in the classroom and school community, connecting teachers between the island communities. The programme was based on the values base in the professional standards of the General Teacher Council for Scotland and asked teachers to lead a curriculum development in their own setting. The theoretical base of the programme was established from Scottish work on teacher agency (Priestly et al., 2015). Data was collected through the documentation of the development, including personal notes, and working documents created in the programme. Discourse analysis was used to identify the outcomes for the joint development and the first groups of teachers participating in the programme. The analysis of the development work recorded the challenges faced by rural authorities to establish a structure where teachers could 'lead the curriculum' when not in a promoted post. This linked to outcomes from the delivery where teachers recorded their frustration about a lack of professional development opportunities. A key outcome was that island values informed practice and supported teaching values. This research has directly informed the provision of rural teacher leadership opportunities through the Scottish College of Educational Leadership.

Friday, August 3
3:30 - 5:00

SUB Ballroom B

Theme: Partnership

3:30-4:00 *Building Capacity within Rural Indigenous Communities*

Vicki Howard, University of Montana Western & Lona Running Wolf, Napi Elementary School

Through an OIE grant, UMW and BCC have partnered to provide initial certification for 40 Indigenous teacher candidates seeking a K8 (Kindergarten through eighth grade) or P3 (Preschool through third grade) degree and/or certification. Most candidates are teachers, paraprofessionals or long-term substitute teachers in and around Browning. The most important objective of this project was to design and implement a sustainable program that will address the long-existing shortage of teachers serving Indigenous children on the Blackfeet Reservation.

Through this grant, Western and BCC recruited Blackfeet faculty from the Browning School District to design and deliver a Blackfeet culturally immersed K8-UMW curriculum, for Blackfeet teacher candidates who teach or will teach in the Browning schools. The teacher preparation curriculum aligns with curricula and practices used in the Browning Schools, so candidates can move seamlessly from our classrooms to their classrooms. Through a Blackfeet-grounded education -- one that also includes the foundation for success in the Western world, it will be possible to rebuild ancient values, restore harmony and eventually erase the roots of poverty.

The purpose of this presentation is to describe a community based delivery model that has the potential for replication in other rural areas to build sustainable capacity from within rather than depending upon external recruitment.

4:00-4:30 *Maximizing Partnerships in Rural Communities: Multiple Pathways to Support Teacher Development*

Suzanne Arnold & Barbara Seidl, University of Colorado, Denver

The Partnership for Rural Education Preparation (T-PREP) at the University of Colorado Denver partners with more than twenty rural districts to provide “grow your own” pathways to the teaching profession, as well continued teacher development for all teachers through induction and professional learning options. Presenters will share the structure of two innovative teacher preparation pathways for rural districts: (1) a fully online high-tech high-touch alternative licensure pathway designed and structured to create a personalized learning program with a web of support for the candidate with a program structure allowing for continuous enrollment, where a candidate can start the program at any point in the school year; and (2) Community College partnerships where local students can seamlessly move from an AA to BA degree through coursework and mediated field experiences delivered locally across all four years. Presenters will also share how they optimized a Teacher Quality Partnership Grant to partner with rural districts by developing resources, tools, and processes for district leaders to leverage for professional learning and teacher development purposes.

4:30-5:00 *Designing a National Talent Strategy for Rural Schools*

Ryan Fowler, TNTP, Allen Pratt, NREA, & Steven Johnson, Lisbon Public Schools

What would it look like to build a national, coordinated effort to recruit and retain teachers in rural schools? In this session, we will explore a new, collaborative effort, designed to do just that.

As national partners aligned around the goal of building better futures for rural schools, the NREA, Rural Schools Collaborative, and TNTP are teaming up to share the framework of a forthcoming national rural teacher talent strategy. As part of this strategy, we are developing new tools to increase access and awareness of job opportunities in rural schools, elevate the stories of rural communities, and provide a set of retention resources tailored for specific rural regions. This session is an opportunity to preview our ideas at an early stage and help us make them better!

Using a Design Thinking format, we will use this session to:

- Gather Inspiration: To inform our strategy, we want to know what matters in your context for recruiting and retaining teacher talent.
- Generate Ideas: We'll use each other to generate new ideas that can be tested during our program design process.
- Make Ideas Tangible: By sharing some early prototypes of our current strategy, we'll ask for your reactions and feedback.
- Share the Story: You'll help us begin to craft a human story around the rural teacher experience that can inspire others toward action.

Your input and feedback is critically important, so please join us in designing this national effort to showcase the rural advantage of our nation's rural schools!

Friday, August 3
3:30 - 5:00

SUB Ballroom C

Theme: Profession

3:30-4:00 ***MSU's Rural Practicum: A Promising Practice to Address Teacher Recruitment and Retention***

Tena Versland, Janessa Parenteau & Lynne Peterson, Montana State University

Recruiting and retaining qualified teachers for America's rural schools remains a problem (Showalter, Klein, & Lester, 2014; Barley & Brigham, 2008). According to Barley and Brigham (2008), offering practice-teaching opportunities in rural communities could help address the issue of teacher recruitment and retention in rural areas. However, few teacher education programs offer coordinated opportunities for rural clinical practice, especially in remote settings. Montana State University has been engaged in developing strong, substantive partnerships with rural schools in Northeastern and Central Montana to create sustainable preservice experiences for education students. The MSU Rural Practicum has placed 28 junior level students in week-long immersive teaching experience in 11 small, rural schools in the past two years. Data collection from participating students and rural school administrators indicates the rural practicum holds promise in helping students understand the unique benefits and challenges of living and working in rural communities. Data also suggest students in this experience had a much more favorable view of rural schools and communities and were more likely to consider applying for and accepting teaching positions in rural communities.

This presentation will share our efforts in creating this immersive practicum experience as well as some of the challenges we faced and our current plans for future implementation.

4:00-4:30 ***Meeting the Need for Special Education Teachers in Rural Areas***

Susan Gregory & Rene Rosell Yarbrough, Montana State University Billings

Montana has a critical need for special education teachers. It reflects a national trend that there is a severe shortage of qualified teachers in this field and that the shortage is particularly acute in rural areas. To meet this need the Office of Public Instruction developed a project to support licensed teachers in rural schools become endorsed in special education. The project was developed in conjunction with institutions of higher education that prepare teachers to obtain their special education endorsement. Teachers who apply to the project are licensed teachers who do not have any qualifications to teach students with special needs. The purpose of this study was to determine the experience of these teachers and the challenges they face.

Teachers and in the project and their school administrators were surveyed. Teachers were also interviewed to determine the issues that special education teachers face in rural schools.

School administrators were satisfied with the preparation of these teachers. The teachers described the challenges and the benefits of teaching in rural schools.

The findings indicated that the experience of these teachers reflects that of teachers reported in the literature. This project is also fulfilling a need in some rural parts of the state however the need for special education teachers remains a critical need in the state of Montana.

4:30-5:00 ***Filling Classrooms: Colorado's Efforts to Resolve the Educator Shortages in Rural Colorado***

Robert Mitchell, University of Colorado, Colorado Springs & Megan Quitter, Colorado Department of Education

The state of Colorado continues to struggle with finding educators to fill vacant positions in the state's 147 rural districts. In recent years, rural school districts have been forced to operate without qualified a science, math or special education teacher for multiple years. The lack of educators available and interested in working in Colorado's rural schools has continued to exemplify the growing gaps between the "have" and "have not" school districts throughout the state.

In response, the Colorado Department of Education and the Colorado Department of Higher Education (and their member higher education institutions) have worked to bolster the educator pipelines into the rural districts throughout the state. Specific efforts have been enacted to help retain veteran rural educators, expose emerging educators to potential careers in rural schools and support teacher candidates who are interested in completing their student teaching in remote and rural areas.

This presentation outlines the challenges and the ongoing solutions that are designed to support Colorado's rural districts and bolster the teacher pipeline to these areas. Included in this discussion is a critical examination of the problem, a review of the legislative and agency-driven solutions and recommendations for further needed action to resolve this ongoing problem.

Friday, August 3
3:30 - 5:00

SUB Ballroom D

Theme: Leadership

3:30-4:00 ***The Five Standards of Boardmanship and their Relationship with Student Achievement***

Ivan Lorentzen, Flathead Valley Community College & William McCaw, University of Montana

It has been well established that boards of high and low achieving districts behave differently. More recently, research in Montana and Washington have detailed which board behaviors are statistically correlated with high student achievement, and which behaviors can predict low student achievement. In addition, this influence was found to be independent of district size. This session will identify elements of board behavior - both collective and individual - that has been shown to be related to student achievement. School boards matter, and their influence is not insignificant.

4:00-4:30 ***Rural Schools, Standards-Based Teacher Evaluation and Technology's Odyssean Promise***

Daniel Lee, University of Montana, Jennifer Lutey & Lisa Kerscher, Brightways Learning

The effective implementation of performance-based teacher evaluation that encourages reflective teaching and subsequently improves practice is a challenge for any school district. In rural schools, the lack of adequate staff and resources pose particular challenges. Evolving technology in concert with an embedded standards-based teaching rubric may hold promise for improving reflective practice in resource-strapped rural schools. Investigators working in a rural Alaskan school district during the 2017-18 school year studied the implementation of three types of technology: "snippets" consisting of text, photo, and short video of classroom activities; "walkthroughs" whereby an observer selects responses in a customized online form following a brief classroom visit and finally, a "formal observation" with a toolset to allow an administrator to rapidly record, or script what they observe during this formal session. Regardless of the type of technology utilized each permit alignment of teacher practice to rubric indicators and each may readily be made available to an observed teacher. Not surprisingly, investigators found that formal observations have the greatest impact on reflective practice while walkthroughs and snippets fall in close behind. Because rural school districts lack the resources and supervisory personnel to provide formal observations beyond those that are minimally required; the investigators conclude that technology just might hold promise for increasing reflective practice among teachers. To achieve this, however, requires more work with rubric familiarization and technology proficiency.

4:30-5:00 ***Building a Foot Bridge in Rural Education***

Melody Schopp, Consultant

Rural education should be viewed with a lens of options rather than barriers. The opportunity to be nimble and creative is often overlooked when faced with the perception of obstacles in rural areas that may or may not exist.

This session will focus on proven strategies that strengthen rural education with a systemic approach. It will encompass crosscutting ideas that include all strands of the symposium themes to include:

- Engaging community in authentic ways;
- Growing the profession innovatively that results in retention;
- Supporting and enhancing innovative and high leverage practices that result in student success;
- Maximizing the impact of technology to ensure access to meet student interests regardless of their zip code or remoteness; and
- Build internal capacity for leadership within the school districts.

Additionally, the session will consider how state and federal mandates can inhibit innovation and success in a rural setting. This requires that state policy makers and education leaders be well informed of the nuances of rural education as well as the potential. What our rural communities want from our leaders at all levels are partnerships and the intention to remove barriers instead of building new ones. Examples of success will be shared.

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Safe travels everyone!