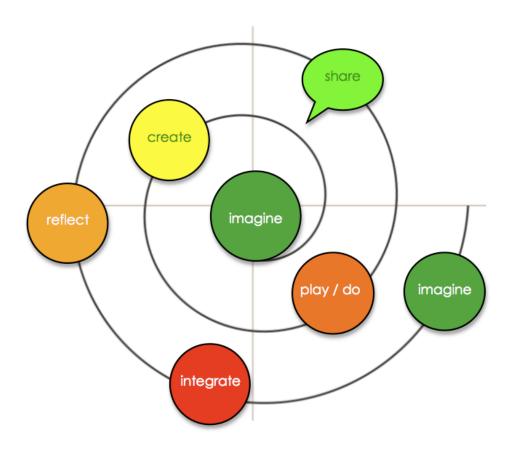
symposium 2015



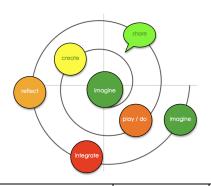
connecting curriculum to engaging hands-on activities



Two Weeks: July 21st – July 31st, 2015 RAFT Colorado 3827 Steele Street | Unit C | Denver www.raftcolorado.org 720-242-8833

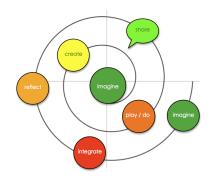
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www.raftcolorado.org/teachers/workshops



schedule

Week 1		Tuesday	Wednesday	Thursday	Friday	Saturday
		July 21	July 22	July 23	July 24	July 25
am	STEM Track	STEAMy Mythic Creatures DMNS	It's Shocking: Electrons Are Fun Tom Graves	The Ins and Ins of STEM Violeta Garcia	STEAM On Denver Art Museum	Dem Bones Are Simple Machines RAFT – Chris
9 – 12	Literacy Track	Engineering through Literacy Amy Turino	Building Com- munity Creatively through Literacy Jane Diamond	Celebrating RMNP's 100 th Birthday! History Colorado	Fun Time with 4 Phonemic Activities RAFT - Gwen	Meeting Literacy Standards through Art Susan Leieritz
12 – 1	Lunch	RAFT will supply drinks and dessert				
3 pm	Electives	Make More Money w/Mark! Mark Arseneau	Maker Tech in the Library Beth Crist and Ashley Kazakya	At Ohm in Education Robyn Jennings	Design Thinking Denver Art Museum	Automata: Art + Science + Simple Machines RAFT - Chris
1	Green Room	Facilitated Work /Prep Time				
14	leek 2	Tuesday	Wednesday	Thursday	Friday	Saturday
V	reek 2	July 28	July 29	July 30	July 31	August 1
12 am	STEM Track	Engaging Data by Design Diane Gaston	Inquiry Science + Literacy Connection Part 1 Barry Kluger Bell	Places: Bridging Science & Social Studies Blue Lotus	Phun with Physics Denver Children's Museum – Sarah	Back-to-
- 6	Literacy Track	Keeping History Alive and Well RAFT - Angela	Stories Into Plays RAFT – Tracy	Hands-On Literacy RAFT - Nick	Symbolic Linear Family Trees Justine Sawyer	School Bash!
12 – 1	Lunch	RAFT will supply drinks and dessert				
3 pm	Electives	Size Matters Vee Lew, Tracy Cress, and TBD	Inquiry Science + Literacy Connection Part 2 Barry Kluger Bell	School Garden: An Outdoor Classroom Slow Food	Make a Plan to Make More Money Mark Arseneau	
Green Room Facilitated Work / Prep Time						



Tuesday, July 21st

STEAMy, Mythic Creatures

DMNS

About the content: STEM track Upper Elementary & Middle School

Using the characteristics of animals as a foundation, participants will use provided supplies to create a mythic creature whose diet, habitat, adaptations, and relationship to other creatures are creatively and purposefully designed. Participants will leave having created their own mythic creature with a unique story behind it. Participants will also weave science and culture together as we explore mythic creatures from around the world and the variety of ways they can be explored through STEAM.

About the instructors:

Samantha Richards joined the Denver Museum of Nature & Science in 2010 after earning her master's in museum studies from the University of Colorado at Boulder and her bachelor's in environmental geology from the University of Michigan. She is the educator for the permanent exhibitions Prehistoric Journey and Space Odyssey and for the temporary Mythic Creatures: Dragons, Unicorns and Mermaids exhibition. Rachel Mullen has worked as Coordinator of Volunteers for Temporary Exhibits at the Denver Museum of Nature & Science for one year, including the Mythic Creatures: Dragons, Unicorns and Mermaids exhibit. Prior to her work at the Museum, Mullen taught middle school and high school Language Arts for five years.

Engineering through Literacy

Amy Turino

About the Content: Literacy track Elementary What does it mean to be an engineer? As teachers we engineer everyday! Share this experience with your kids through literacy time in the classroom. In this class, explore literacy centers that can be utilized all year long to help students create identities of self as engineers, writers, thinkers, and learners. Using repurposed materials, you will engage in hands-on activities that will have you creating, re-engineering, prototyping and testing while reinforcing Language Arts standards. Leave with lesson templates that will have you integrating content and keeping your students engaged daily!

About the Instructor:

Amy Turino completed her PhD in Curriculum and Instruction from the University of Denver last summer and has been enjoying the year since getting to know her daughter Aria. Amy is glad to be back with her second family, RAFT, to share some fun interactive teaching experiences with some of the most creative and hard working teachers in Colorado - RAFT members!

Afternoon

Make More Money with Mark!

DPS

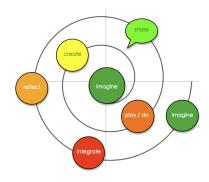
About the Content: Electives DPS

Teachers

DPS teachers ... this is your chance to learn exactly how the ProComp system works ... and how you can build on a RAFT Symposium workshop to create an Action Research Plan that will add to your professional expertise and put you on a path to collecting a bigger paycheck! Take advantage of this opportunity to invest in YOU before the craziness of the school year begins – Mark will be able to answer all of your questions around topics and implementation and will help you to personalize an Action Research Plan proposal that aligns with your curiosities and your passions.

About the Instructor:

Mark Arseneau is the PDU Coordinator at Denver Public Schools and a member of RAFT's Teacher Advisory Board.



Wednesday, July 22nd

It's Shocking: Electrons Are Fun!

Tom Graves

About the content:

STEM track Grades 1-12

About the instructor:

This is NOT a tech-heavy class so don't be concerned about too much MATH!!! This session will explore some basic concepts of science as they relate to electricity: what electricity is, where it comes from, what it tastes like and why it behaves the way it does. Participants will construct a small battery using pennies and use it to create light and make special PlayDoh to use as wiring for simple circuits. A grand prize will be awarded for the "Best in Class" use of these materials as art forms. Join us for a 'shockingly' good time as we look at innovative ways to introduce these ideas at different age levels. **Tom Graves** began work in our national nuclear laboratories at the height of the cold

Tom Graves began work in our national nuclear laboratories at the height of the cold war. For 24 years, Tom served as an Aerospace Engineering Manager for NASA and helped put 12 men on the moon. Since then, Tom has worked in private industry doing military systems design, automotive airbag manufacturing and designing and marketing high speed automated assembly machines worldwide. Although technically 'retired', Tom now substitute teaches high school math and science in Douglas County.

Building Community Creatively with Literacy Jane Diamond

About the I Hear: I forget.

Content: I see: I remember.

Literacy I do: I understand. (Chinese Proverb)

track Elementary-Middle School Create two complete projects that can be used in infinite ways to build classroom community. Participants will make their own "vision boards" and collaborate on the many ways they can be incorporated into the classroom. Then, learn how to combine academic literacy with financial literacy through using The Friendship Note Paper curriculum. Participants will also learn how this activity can be used as a class or school fundraising business.

About the Instructor:

Jane Diamond is a Master teacher of 25 years, who has taught preschool through college age students. She has presented workshops for teachers and had articles published in "First Teacher. Jane implemented the Friendship Note Paper Project successfully for ten years in her own classroom as an after school enrichment class, and has consulted with teachers about how to customize the program for them and their unique goals.

Afternoon

Maker Tech in the Library Beth Crist & Ashley Kazakya

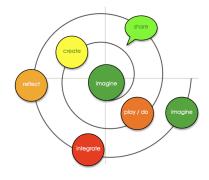
About the Content: Electives PreK – 12

Educators

Engage in hands-on fun with Maker technology found in many libraries, like MakeyMakeys, sewn circuits, and the latest in interactive summer reading programs. It's literacy! It's STEM! It's fun! And it's available right now at your local 21st Century Public Library, along with a wealth of resources for teachers and students of all ages. Oh, did we mention—it's all still free!

About the Instructors:

Ashley Kazakya is project manager, Maker movement leader, teen library program trailblazer, and library innovator. **Beth Crist** is youth and family services guide for librarians, especially passionate about early literacy and serving families in poverty. Together we're up on library trends and ready to help facilitate public library-school partnerships.



Thursday, July 23rd

The Ins and Ins of STEM

Violeta Garcia

About the content: STEM track Elementary-Middle School

About the instructor:

Dr. Violeta Garcia's mission is to advocate for the advancement of students who typically do not have experiences and exposure to STEM—to inspire and prepare our next generation of STEM leaders. She recently served as the STEM Education Coordinator for the Colorado Department of Education, where she was in charge of running the STEM in Action Program and building capacity for teachers to interpret and apply STEM practices through problem/challenge based learning in STEM and to make learning experience meaningful and personal for all students. Currently, Violeta is the principal of STEM Learning by Design, an independent consulting firm providing program

STEM Integration and Inclusion workshop. Detailed description coming soon ...

Celebrating RMNP's 100th Birthday!

History Colorado

About the Content: Literacy track K-12 Join educators from History Colorado Center to explore and use the story of our own Rocky Mountain National Park from every angle. We'll explore primary sources to understand the park's history and geography, use STEM to understand its ecosystems, then create hands-on art and literacy activities using RAFT materials about our own stories and connections to RMNP.

design, professional development, and STEM resources to educators.

About the Instructors:

April Legg is the School Programs Manager at History Colorado Center, and leads the development and delivery of HCC's hands-on, standards-based programs for elementary, middle and high school students. April's favorite place in Rocky Mountain National Park is Trail Ridge Road. Liz Cook is the Environmental Educator at History Colorado Center, and leads programs for students, teachers, and adults focused on how people and the environment have interacted in Colorado History. The boulder field on Long's Peak is her favorite place in RMNP.

Afternoon

Ohm in Education

Robyn Jennings

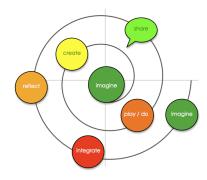
About the Content: Electives Pre-K thru Elementary

About the Instructor:

Yoga studios are popping up like Starbucks. But, yoga is not just for people looking to get in a fun, relaxing workout. Come enjoy a session where yoga sequences will be blended with conversation on how to incorporate the benefits of yoga into your classroom or center. It has countless applications in education settings, everything from helping students focus before an assessment, to kinesthetically learning the life cycle of a plant, to a curriculum tool to ease transitions and calm children's bodies and minds.

Robyn Jennings is a certified yoga instructor who first began incorporating yoga into her

teaching at Sunflower Preschool, and continued this practice as she completed a teacher residency at Boulder Community School for Integrated Studies in a first grade classroom. She is excited to help you use yoga to bring mindfulness to your students. Namaste



Friday, July 24th

STEAM On

Denver Art Museum

About the content: STEM track Pre-K and Elementary

About the instructors:

What is it about art that can unleash the creative explorer in a child? Is it the sense of magic and wonder incited by an artwork from another culture or time? Or experimenting with materials in unexpected ways to create something unique? Explore the Denver Art Museum's approach to informal learning through this interactive workshop where you will dive into resources and strategies to engage your students through art. Leave with practical ideas for unlocking that creative spark that extends to all disciplines.

Angela Houdyshell is the Manager of Teacher & School Outreach Programs at the Denver Art Museum (DAM). Angela has been at the DAM since 2011 and has developed and managed the K-12 distance learning program, custom teacher professional development, and teacher resources, including the DAM's Creativity Resource for Teachers website. She has a B.A. in Art History and a M.A. in Art Education with a museum focus from The University of Texas at Austin.

Kristina Mahoney is the Coordinator of Teacher and School Outreach Programs at the Denver Art Museum. As a former Elementary School teacher in North Carolina, Kristina has always had a passion for exploring with young learners through curiosity and creativity. Kristina recently graduated from University of Denver with an M.A. in Curriculum & Instruction, and her thesis explored preschoolers' experience of the Art Museum.

Fun Time with 4 Phonemic Awareness Activities

About the Content: Literacy

track
PreK+Early
Elementary

About the Instructor:

In this workshop, teachers will generate hands-on activities that stimulate phonemic awareness in preschool children and are one sure-fire way to get a child ready for reading! Come learn about four fun phonemic awareness activities using recycled materials you can find at RAFT or in your own home.

Gwen Vann has taught for over 20 years and has a Master's Degree in teaching, with extensive experience in early childhood education, literacy, and special needs. She also started Colorado's first educator consignment sale after she retired because she loves teachers and she loves "stuff" and hands-on learning!

Afternoon

Design Thinking

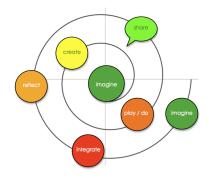
Denver Art Museum

About the Content: Electives PreK - 12

Seeking creative solutions? Learn about Design Thinking: a human-centered design approach schools use to seek new solutions to challenging problems. Preview how the Denver Art Museum adapted the process for students in distance learning classes. During the session you will begin to apply the process to a challenge your school faces.

About the Instructors:

Please see above.



Saturday, July 25th

Dem' Bones, Dem' Bones,

Dem' Dry Bones ... are Simple Machines?

RAFT

About the content: STEM track K-12th We all know how the song lyrics go . . . but hardly anyone realizes that the bones work together to form a network of simple machines. Come build a skeleton (out of stuff less gross than real bones and muscles) and see how the bones work together with muscles and each other to make the body move . . . it's interesting, fun, and easy to differentiate to all grade levels!

About the instructor:

Chris DeKay started preparing for his RAFT Wrangler job when he was a six-year-old "garage floor scientist," gradually developing into a "MacGyver of education"! Chris has enjoyed teaching students and working with a wide variety of teachers at the Teton Science Schools, Keystone Science School, and the Thorne Nature Experience, using anything nature has to offer to spontaneously engage students in learning. Chris has a double major in Environmental, Population, and Organism Biology and Molecular, Cellular, and Developmental Biology and is a graduate of the Teton Science Schools Graduate Program.

Meeting Literacy Standards through Art Susan Leieritz

About the Content:
Literacy
track

K-3rd Grade

In our standards-driven environment, it is frequently hard to find time for art in the elementary curriculum. However, if we are to truly to get every child to reach the standards, then we must differentiate instruction--which is where art comes back in! In this workshop, we will unwrap the literacy standards, look for ways to combine various elements of the standards, and then find the spaces for using art to most effectively meet those standards.

About the Instructor:

Susan Leieritz worked for six years at Montview Community Preschool and Kindergarten, a play-based private school in Denver. Three of those years were in the preschool, and three in the kindergarten. Jane has a master's degree in education, with a focus on Curriculum, Instruction, and Assessment development. I am committed to the bringing the benefits of authentic learning experiences to the public school classroom, based on student interest, readiness, and learning profile.

Afternoon

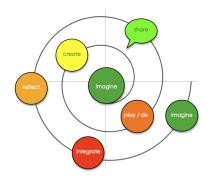
& Simple Machines This session is back by popular demand from

RAFT

Content: Electives Upper Elementary-High School This session is back by popular demand from last year's Symposium! Developed by the Exploratorium's PIE Institute, Cardboard Automata are a playful way to learn about simple machine elements such as cranks, cams, levers and linkages while creating an artistic mechanical sculpture. This activity uses simple, RAFTy materials to get started, and can become as complex as the learners imagination makes it. Cardboard Automata is a great example of integrating art, science and engineering. Come learn how this activity can be translated to the classroom at many levels while enjoying this fun opportunity to play, build, and unleash your own creativity!

About the Instructor:

Chris DeKay - please see above.



Tuesday, July 28th

Engaging Data by Design

Diane Gaston

About the content: STEM track Upper Elementary-High School With a constant push for state and district testing where has all the fun gone? Dive into each of the four areas of the design cycle (Investigate, Plan, Create, Evaluate) to create engaging data based, hands-on lessons that students enjoy but is also fun for the teacher.

About the instructor:

Diane Gaston is CTE STEAM educator with a B.S. in Technology Education and a Masters Degree in Integrating Technology in the Classroom. She was recognized nationally as the 2011-12 Colorado Technology Education Teacher of the Year, awarded the 2009 Service Award for four years of volunteer work with Leave No Trace as the Colorado Advocate/Master Educator and was a recipient of the 2012 Great West Great Teachers Grant for supporting financial literacy in the classroom. She served as the president of Colorado Technology Education Association (CTEA). Diane collaborated with educators across in Colorado through work with the CDE and the CCCS evaluating and recommending statewide assessments for the CTE- STEM assessment bank, writing and evaluating CTE – STEM curriculum modules and developing content tasks and rubric assessment tools for the state.

Keeping History Alive and Well thru Lit Standards RAFT

About the Content:
Literacy track
Upper Elem.
& Middle
School

Social Studies and History are often forced to take the back stage as more and more time is allotted for literacy. This does not have to be the case. It is easy to use a mix of primary and secondary literary sources to help students learn history and social studies while also learning and spending the required time on reading skills. Come see how these sources, coupled with hands-on learning activities, can augment literacy while teaching the history and social studies materials that are critical to good citizenship and are one of the main reasons WHY we want students to learn to read!

About the Instructor:

Before coming to RAFT to be our Chief Re-Imagineer, **Angela Lovisolo** was the Curriculum Implementation Specialist at STAR (Space Technology and Arts) Academy in Colorado Springs, as well as being an active Teacher Adivosry Board Member and RAFT Super Fan She has extensive teaching experience in elementary and middle school, and is finishing up her coursework for a Master of Arts in Administrative Leadership and Policy Studies.

Afternoon

Size Matters

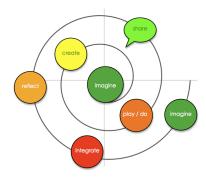
Multiple Presenters

About the Content: Electives Pre-K – 12th

Intimidated by the thought of going big? Come and learn how RAFT member experts have used RAFT materials to build creative, bold, and BIG structures that capture the imagination. From East High School's famous after-prom to the Mayor's Ball to theater productions, our experts have great experience to share with you during this learning and brainstorming opportunity!

About the Instructors:

Vee Lew (East High School After Prom Committee) Tracy Cress (RAFT) and Crew



Wednesday, July 29th

Inquiry Science + Literacy Connection I

Barry Kluger-Bell, PhD

About the content: STEM track Upper Elementary

How do I do Inquiry Science when I have to deal with the Common Core? This session helps to answer at least part of that question. We will use hands-on experience, discussion and video to show the connection between inquiry science and literacy. In the session you will experience a short model inquiry that incorporates science talk and notebooks with lots of reflective discussion along the way.

About the instructor:

Barry Kluger-Bell, Ph.D. is an independent Inquiry Science Education consultant based in Boulder, Colorado. He works with educators throughout the country in K-12 teacher professional development, science graduate student education training, informal science education, pre-school science education, science curriculum development and program evaluation. From 1988-2009 he served as the Assistant Director for Science at the Exploratorium's Institute for Inquiry in San Francisco, where he developed and delivered professional development for thousands of educators, both nationally and internationally.

Stories into Plays

RAFT

About the Content: Literacy track Elementary

Your students may still be a little young for Shakespeare, but they are ready for theater. Short stories and children's books make great fodder for child drama (the good kind). Adapting stories into plays is a great way to engage students in literacy activities and access reading in a whole new way. We will work through which stories make the best plays and then adapt one into a play so that we can do a little acting out.

About the Instructor:

Tracy Cress has taught at various schools throughout DPS for the past 13 years. She currently teaches theater to a wide range of students, and brings a wealth of knowledge about fun and effective ways to engage students in literacy through performing arts. Tracy has also been working at RAFT for the past two years, and brings a wealth of knowledge about using practically free materials for props!

Afternoon

Inquiry Science + Literacy Connection II

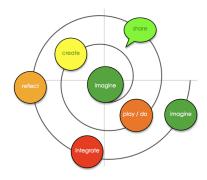
Barry Kluger Bell, PhD

About the Content: Electives Upper Elementary

The Common Core State Standards in English Language Arts gives talk the same status as reading and writing. This session, which follows from Part 1, focuses on student talk, primarily in whole group discussion. It deals with how to establish classroom routines and structures that allow you and your students to have the types of classroom discussion that we saw in Part 1. In this session, you will view video of classroom practice, engage in discussion and experience a model of discussion around a hands-on activity.

About the Instructor:

Please see above.



Thursday, July 30th

Places: Bridging Science & Social Studies Using Local Context

Blue Lotus Consulting & Evaluation

About the content: STEM track

As Clifford Geertz (1996) said, "No one lives in the world in general." We can apply this concept to our classroom instruction to integrate science and social studies in ways that are meaningful and relevant to our students, wherever they are.

Elementary -High School

About the instructor:

Kelly Keena's background includes field work and administration in environmental education, international study of cultural geography and the environment, formal classroom work as a licensed teacher and instructional coach, two honorarium faculty positions working with pre-service teachers in science methods of instruction, and research regarding children's connection to nature in green schoolyards using participatory research methods.

Hands-on Literacy

RAFT

About the Content:

Literacy track

Elementary
About the
Instructor:

Unlock your students' inner storytellers and promote questioning readers with RAFT's collection of fun literacy games and activities. Projects like literacy cubes, "Craft Your Own Story", and "In the Bag" offer children a more hands-on, learner-focused approach to literacy, and offer teachers greater versatility and flexibility. Activities like MathLibs, imagination walks, design-build stories, and the Catapult Word Wizard allow for the integration of literacy into other subject areas, such as science, physical education, and engineering. Effective and engaging for students of all ages, hands-on literacy is really

something to write home about!

Nick Haag was a para for five years, ran a before-and-after school program for four years, and has coached and worked with kids in a variety of educational settings since he was a kid himself (his mom is a teacher too!). Nick has been working at RAFT for almost five years, where he supports teachers, develops activity ideas, runs events, and does all of the interesting copywriting.

Afternoon

The School Garden: An Outdoor Classroom

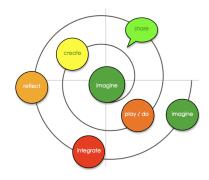
Slow Food Seed to Table

About the Content: Electives K-8th Grade

About the Instructors:

The focus of this workshop is two-fold: activities centered around gardening and activities centered around "cooking". The hope is to offer options for teachers to potentially replace indoor classroom activities with equal "outdoor" classroom activities to encourage hands-on, real-world learning.

Allie Molinda is Slow Food Denver's Seed To Table program director. Her connection with school gardens began 12 years ago with a garden she started at her kid's elementary school in Littleton. Allie is also an Arapahoe County Master Gardener and, by profession, a Physical Therapist. **Gigia Kolouch** is Slow Food Denver's Seed To Table Education Director. She has been a cooking instructor for 25+ years and involved in school gardens since 2000. She is currently working on Slow Food USA's National School Garden curriculum.



Friday, July 31st

Phun with Physics

Denver Children's Museum

About the content: STEM track

You'll learn key principles of physical science and strategies for facilitating hands-on investigations to bring rigor and depth to your classroom explorations of force and motion.

PreK – 2nd
Grade

About the instructor:

Sarah Brenkert holds an M.S. Ed in early childhood and elementary education from Bank Street College of Education in New York City. Currently, she is the Director of Education at the Children's Museum of Denver, where she directs the museum's school and public programs, develops content for exhibits, and leads the research and evaluation of museum experiences. Previously, Brenkert oversaw education programs and teacher professional development at Denver Zoo. Her areas of expertise include constructivism, child development, and play theory, with a professional emphasis in free-choice learning environments and adult-child interactions.

Symbolic Linear Family Trees

Justine Sawyer

About the Content: Literacy track Middle & High School

About the Instructor:

Participants will create a linear family tree using a rope several feet long with a variety of yarns, ribbons, beads, surgical tubing, and whatever other amazing items we can scrounge at RAFT. Family members will be symbolically represented in line, texture, and color based on writing an "I Am From" poem and other written reflection. An excellent culturally responsive lesson adapted from Ken Vieth, author of "From Ordinary to Extraordinary". Full lesson with standards and assessment provided.

"I am a 20 year veteran visual arts educator and professed RAFT addict (my husband no longer allows me to drive the big truck to RAFT). I have taught all levels from pre-K through 12th. I am a self-proclaimed 'master of nothing' because of my love to learn about and work with new media and processes." **Justine Sawyer** currently teaches at East High School and was selected by her peers to receive the 2015 National Art Educators' Association Pacific Region Secondary Art Educator Award.

Afternoon

Make a Plan to Make More Money

Mark Arseneau

About the Content:

Now that you have finished your Symposium, Mark will explain next steps and support you in developing concrete actions to develop your PDU plan so that it can be in place as you start the coming acheel year!

Electives you start the coming school year!

DPS Teachers

About the Instructor:Mark Arseneau is the PDU Coordinator at Denver Public Schools and a member of RAFT's Teacher Advisory Board.