

MULTI Summer 2018 Water Resource Use & Management

6/8/18

JANELLE JOHNSON MAY 23, 2018 02:35PM

What's the Problem?

JANELLE JOHNSON MAY 23, 2018 02:36PM

Essential questions or statement of problem

The amount of fresh water is limited but the demand for water continues to grow. How can we meet the demands for fresh water?

JANELLE JOHNSON JUN 03, 2018 05:29PM

Possible PBL on Mining & Fracking

PBL: Groundwater contamination, water availability-- water budget

Hook: Debates on dams and water use

Mining and fracking (CU resources at)

<http://insideenergy.org/wp-content/uploads/2017/12/Water-Use-in-Hydraulic-Fracturing.pdf>

Water Use

JANELLE JOHNSON JUN 08, 2018 05:36AM

Video re Colorado River (2 min.)

The water shortage from the Colorado Basin and a potential improvement to the current shortfalls in the water supply.

How can a water shortage crisis be avoided?

What is the role of the Bureau of Reclamation?

What are some of the factors that make planning today's water budget more complicated?

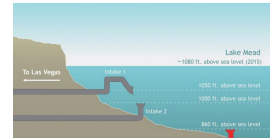
What are some of the technology tools that facilitate the Bureau's work?

What does "critical threshold" mean?

How and why did planners revise the pumping station design?

Discuss

A New Generation of Water Planners Confronts Change Along the Colorado River | U.S. Climate Resilience Toolkit



In 2010, federal and state partners joined forces to study the Colorado's likely flow and uses out to 2060. The U.S. Bureau of Reclamation led the effort, and all seven states spanning the watershed contributed resources such as funding, time, and expertise.

CLIMATE

JANELLE JOHNSON JUN 08, 2018 05:35AM

Water Use for Different Purposes Activity

water_use.pptx
Powerpoint presentation
PADLET DRIVE

JANELLE JOHNSON JUN 07, 2018 02:53PM

Numbered heads together activity

<https://www.sciencenewsforstudents.org/article/explainer-what-fracking>

What are some of the benefits from fracking? What are some of the negative impacts for nearby residents?

<https://www.sciencenewsforstudents.org/article/fracking-wastes-may-be-toxic-tests-show>

What are some of effects of fracking wastewater on hormones?

What are some of the related health effects from hormone disrupters?

<https://www.sciencenewsforstudents.org/article/thirst-water-moves-and-shakes-california>

How is the removal of groundwater from aquifers impacting California? How did GPS help scientists identify the cause of the problem?

<https://www.sciencenewsforstudents.org/article/many-earths-groundwater-basins-are-drying-out>

What role do satellites have in helping us better understand groundwater resources?

What are some of the stressors on aquifers, and how are they related?

RICHARD WAGNER JUN 08, 2018 07:51AM

Water Education Colorado Citizen's Guide to Water Conservation

Water Education has a series of excellent guides available online or in booklet form. Here is the link for the guide for water conservation. Lots of great pictures. Also available: Where Your Water Comes From, Colorado Water Law, Water Quality Protection, Denver Basin Groundwater, and more https://issuu.com/cfwe/docs/citizens_guide_conservation

KATYA SCHLOESSER JUN 08, 2018 12:57PM

Pete McBride video on the Colorado River

<https://vimeo.com/114386144>

This is a visually beautiful and powerful short movie about the Colorado River- check it out!

Talk on Dams

DAWN_CUMMINGS MAY 31, 2018 02:57PM

graphic organizer on water: humans vs nature

graphic_organizer_humans_vs_nature_and_water.docx
Word document
PADLET DRIVE

DAWN_CUMMINGS MAY 31, 2018 02:58PM

graphic organizer on Dams in CO

dams_in_CO_graphic_organizer.docx
Word document
PADLET DRIVE

CASSIE HAYTER JUN 08, 2018 10:56AM

Vocab/Notes from Talk

acre feet
Dust Bowl
individual dam owners/water rights
Math connection: determine the max. load of a dam/ Safe Storage Level
Statutory Authorities
Math connection: probability of failure (risk= probability of failure x consequences)
Impermeable

Impervious

Geometry connection: design of the dam (slope)

Seepage

Hazard creep: as development increases in Colorado, old dam now has houses around goes from low hazard to high hazard (Johnston Reservoir)

<https://www.youtube.com/watch?v=5CcVSVhAYvA>

Main spillway

Overtopping- reservoir rises over the crest of dam

Field trip/history in CO: 1933 Castlewood Canyon Dam, pre Cherry Creek dam (PBL dam design how would you design with the technology avail. to avoid this? Or how would you rebuild?)

1982:Lawn Lake Dam, can see the scar and debris fan on the mountain

student design emergency action plan

PAR- people at risk

CASSIE HAYTER JUN 08, 2018 11:02AM

Education awareness when living near Dam

-Ideas discussed to educate students for example: Quincy Res.

-Rationale: allow the public to make rationale evacuation decisions

-annual pamphlet/PSAs

-Flood design/evacuation route signs

-Drills in schools for evacuation

-CDOT signs on highway

-Dumb ways to die campaign

Career Connections

WRENTWEET MAY 30, 2018 02:07PM

GLOBE International STEM Network Members (GISN)

The GLOBE International STEM Network (GISN) is an international network of STEM professionals (Science, Technology, Engineering, Mathematics) that work with GLOBE students around the world conducting science. STEM professionals mentor students and teachers, present scientific ideas, and/or collaborate on scientific research. Each relationship between a STEM professional and a GLOBE school is unique, and is determined by the STEM professional and the school.

Check Out The Website for Career Connections:

<https://www.globe.gov/web/globe-international-stem-network/overview/gisn-members>

WRENTWEET MAY 30, 2018 02:18PM

National Center for Atmospheric Research (NCAR)

At NCAR, they don't forecast the weather. They get inside the weather, climate, and surrounding environment to understand it better. They study the Sun, air chemistry, how the atmosphere interacts with the land and oceans, and how we change and are changed by weather and climate.

Check Out Their Website:

<https://www.youtube.com/watch?v=PVNDI29n8kl>

LUEVANON052010 JUN 08, 2018 01:11PM

in my first respond from Monday i introcuded my focola studet

NRAYNOR1 JUN 08, 2018 11:25AM

possible pathways

break stereotypes (Who-what)

keep pathways open relevance

explore possible options.

family (dialogue with)

essential skills foundation

VECORRAL JUN 08, 2018 11:29AM

Possible pathways

- break stereotypes (who and what)

- keep pathways open (relevance)

- explore possible options (family plays an important role but there could be communication issues)

- essential skills (foundation)

VECORRAL JUN 08, 2018 11:34AM

Strategies for a career expo

- translate information to multiple languages

- involve local government

- involve strategic partnerships office

- involve organizations that work with families

- facebook messages

Focal Students' Funds of Knowledge

JANELLE JOHNSON SEP 21, 2018 01:23PM

Windows and Mirrors!

Since you have been thinking about your focal students all week, and reflecting on how well these learning activities align to the focal students' needs, take a step back. How can you use a strengths-based perspective of your focal students and the resources/ideas/approaches generated this week to START with those students' strengths in mind?

CASSIE HAYTER SEP 21, 2018 01:22PM

Strength vs. Deficit

CLD: Culturally Linguistically Diverse
Strength: Air of superiority of student can be described instead as outspoken, confident
-Expectancy theory/stereotype threat
-"latch key" independent culturally responsive
-ecological view- context relationship
-attribute

Deficit:

-Over-judging parents
-Assumptions w/ SES, race "broken homes"
-Fixed mindset
-lowered expectations
-"fixing" kids
-dumbing it down
-generalization hear say stereotypes

Changes to language:

-assumption that immigration is seeking better life
-use of "always"/"never"
-"language barrier" means language is a problem, we can actually work around this and figure out how to communicate
-second language- we work on language development with all students (academic language)
-"Because of SES"
-no attribution
-Assumption-latino-> poor: can reframe lower income community, low resource
-gets bored- is the content engaging?

LUEVANON052010 JUN 08, 2018 01:06PM

Many times

JESSIE PAPKE OSTENDORF JUN 08, 2018 12:43PM

Strength vs Deficit

EMBJEE

Reminding myself to rephrase in my head and verbally to my peers - strengths vs deficits. Get the bitchy complaint part out

so that I can allow myself a reframe. Even write it down and EDIT and CORRECT my own deficit thinking and labels.

This would help me to remember their strengths over their deficits. Utilize the strengths for growth and planning.

Haha yes, for sure! Great idea to write down and edit.

— JANELLE JOHNSON

NRAYNOR1 JUN 08, 2018 01:29PM

Focal Student

With today's workshop I think with my focal student, I would look a little deeper into his strength and not much in his behavior. I could make him a leader in a project, that way he could use use his skills to help his fellow students. With any luck, by making this student a project lead, he would become more involved in class and maybe a better student in his other classes.

Great approach! — JANELLE JOHNSON

CTDAHLE JUN 08, 2018 12:48PM

Know your biases...Know that you ARE biased!

We all have biases and they color our interactions with kids. We cant avoid having them, they are a product of our upbringing, our education, and the environment in which we live and teach. So the critical thing is to be aware of them and to seek to mitigate any negative impacts they may have on students. It is critical to be aware of student's backgrounds and family situation. Is the family indifferent or hostile to the school, or are they afraid of/intimidated by the school, or perhaps embarrassed?

And how would you apply these great ideas to your focal students? — JANELLE JOHNSON

EPALMER99 JUN 08, 2018 12:46PM

Focal Students...

I must keep in mind to not discount students, their backgrounds, their upbringing, their experiences who are ELL, minorities, from a variety of a family structures, etc. They may have an experience that relates to the content, but are unable to vocalize it. They may have a background in a certain area and unwilling to speak up in a large group, but may communicate with another student or the teacher in one-on-one scenario.

Awesome! And you can really help set the tone at the school level. This matters for the WHOLE staff since everyone interacts with kids and families. — JANELLE JOHNSON

CATALINA VIZUETH JUN 08, 2018 12:45PM

Because of my personal/cultural background, I truly believe that after today's activity on this, I will be able to avoid stereotyping by finding ways to learn more about my students' cultural background, family interests, etc. and try to implement a rich multicultural approach when teaching and helping students become successful academically, instead of making assumptions without having a full scope of evidence of why things are not the way they should be

We're human...it's normal to do it, the important thing is to pay attention to it, like you mentioned. — JANELLE JOHNSON

ANONYMOUS JUN 08, 2018 12:50PM

With my focal student, make sure that I am aware of my own bias or possible assumptions that may be affecting decisions or ways that I am approaching this student.

Nice...can you offer anything more specific? — JANELLE JOHNSON

GRACE_ELEE JUN 08, 2018 01:03PM

Focal Student Reflections

Today was very eye opening because as a pre-service teacher you are able to hear a lot of negative comments from other teachers. I constantly hear about the reasons for the children's negative behavior is due to the parents behavior or lack of engagement. However, it is so important not to make assumptions about our focal students or their families. The language we use shapes our biases, so we need to focus on our student's funds of knowledge and hold high expectations. I need to hold my focal students to their highest potential and understand my own biases.

That's right. We need to step back and think about what WE need to do differently. — JANELLE JOHNSON

TERRI_LIRA1 JUN 08, 2018 12:57PM

Student A has high ability seen through state testing. I push student to reach his highest potential. Student B will do anything a teacher asks, but requires lots of attention. Support is best with pairing and teacher support.

If you are able to pair that is great! — JANELLE JOHNSON

NIKOLE CALMEYN SEP 21, 2018 01:28PM

Reflection

I realized today that I need to be very careful with the language I use to describe my focal students. As teachers it is easy for us to express student deficits and ways we want to turn those into strengths. But in my eyes these are just ways students are different. It does not mean that it is a bad thing to be ELL or low income but it just means learning is going to look different for them. I want to be sure to encompass those differences and really build on their strengths to help them embrace learning in the best way for them.

Exactly. Nicely put! — JANELLE JOHNSON

APRIL_KELSO JUN 08, 2018 01:00PM

Focal Student/Bias

Having preconceptions is a natural occurrence for humans as we take what we already know to try and understand new situations. Being aware of this nature is important as an educator. For all students and my focal student included I strive to make a personal relationship with my students in an effort to eliminate bias.

Absolutely. It's so simple but it's really the most effective.
— JANELLE JOHNSON

ALYSSA CASILLAS JUN 08, 2018 01:08PM

Focal student and bias

Today after reading the focal student papers. I realized that although the teachers thought they were being positive when describing the student they unintentionally were not. Ultimately, they were actually making assumptions, being biased, and making stereotypes on that child's behaviors and skills. As a pre-service teacher I learned that it is important for us to watch for our bias and not make assumptions. I can think before I say, and really take the time to turn it into something positive and upliftings.

KATYA SCHLOESSER JUN 08, 2018 01:37PM

Focal Students Reflection - Inclusion & Diversity

Looking back at my initial descriptions of my focal student, they are written in a reasonably judgmental tone. It's a good reminder to reflect on your own biases and frustrations that develop through the year. I look back at the beginning of the school year and how I treated my students. I was very open minded, patient, and tried not to jump to conclusions. Perhaps I should make a habit of revisiting some of the papers on Inclusion in STEM in the middle of the year, and in the spring, to remind myself to be culturally aware and to develop relationships with all students.

KATIE BARKSTROM JUN 08, 2018 02:29PM

Focal Student' Funds of Knowledge

It is imperative that, as educators, we continuously question our own preconceived notions and be more mindful about our own language as we convey ideas and concepts to our students. As a 6th grade teacher, my students sometimes ask me questions that force me to do this, but not as frequently as I'd like. Each and every one of my students brings a unique skillset and set of strengths to the classroom and it is my responsibility to tap into these and provide learning experiences that allow students to expand on these strengths, share them with others, and take the reins on their own learning. Thoughtful planning and execution of lessons, in combination with the formation of strong and meaningful relationships with my students, can make this possible.

ASHLEY GLENN JUN 08, 2018 02:33PM

Today's exercise about the strengths based perspective was really valuable. The type of conversation that we had today is an imperative conversation for all educators. No matter who you are, we all have biases that need to be brought to our attentions. Realizing how we are reacting to these biases will allow us to not only become better educators, but better teammates and all around better humans. I will definitely think about how I am thinking about students and focus on their strengths more.

KAY BOLERJACK JUN 08, 2018 02:43PM

strengths and needs

Having a better perspective on how to view students and their needs; I would like to consider some of the strengths of my focal students. They both are very caring and helpful. When engaged in the process of learning communities they are always willing to be a good partner. They are attentive and desirous of fulfilling a need; whether its collecting supplies,

putting things away and supporting the team. I will tap into those strengths and give them opportunities to feel like a valued team mate.

RYAN KELLEY JUN 08, 2018 02:47PM

Reflection

As a teacher in a diverse classroom it is important for me to keep an open mind and maintain high standards for all of my students. I know the path to get all students to the intended learning might not be the same but it is important to continue developing those pathways.

SJOSSELYN1 JUN 08, 2018 12:51PM

Almost everything we did is typical of hands on, engagement strategies that help any focal student, no matter what background, become engaged. The other piece to this is the necessary "other" part of learning, which involves the vocab, information, etc. There are many tactics that help keep ALL students engaged, and knowing that, there is not a "perfect" classroom where every child is engaged all of the time. With this in mind, I believe the best approach is trying to establish a personal connection with each student. It is very difficult: I have approximately 150 students; but I make this a priority. The other component that I do have control of is recognizing my own biases, and addressing them.

Questions? Needs?

JANELLE JOHNSON JUN 06, 2018 08:29AM

Full evaluation

**MULTI STEM Summer Institute
2018 Evaluation SurveyWater
in the Southwest - June 4-8, 2018**

Web survey powered by
SurveyMonkey.com. Create your own
online survey now with
SurveyMonkey's expert certified FREE templates.

SURVEYMONKEY



Hi , is there a way I could complete the evaluation? I didn't get the chance because I can't connect wit padlet. I am more than willing to complete the survey. — MA.LAARNI ABERGOS

GRACE_ELEE JUN 08, 2018 01:04PM

Parent Engagement

What are the best tools and methods you have found for effective parent engagement?

Home visits are a great way to connect with parents in a more private/direct scenario and you can talk about anything!

— CATALINA VIZUETH

Find ways to connect with families OUTSIDE of school...community centers, the students' after school activities, etc. Introduce yourself and let them know you're genuinely interested. I'll post a couple good articles just to the left too.

— JANELLE JOHNSON
