

13<sup>th</sup> Annual Teaching & Learning Symposium

## Keynote: Building Inclusive Classroom Communities

Dr. Ellen Moore, Communication – UW Tacoma Dr. Jim Pfaendtner, Chemical Engineering – UW Seattle Dr. Ursula Valdez, Environmental Science – UW Bothell



# **Opening question:**

What does an inclusive classroom community look like in your context?

Write on your index card

## Fostering Inclusive Classrooms in Times of Political Tension

#### Dr. Ellen Moore

Senior Lecturer - Communication School of Interdisciplinary Arts and Sciences University of Washington Tacoma

## "If You Were You"

*If you were a teacher would you teach your students the truth? make origami birds from the history books fly back in time for the truth?* 

#### - Penniman & Garcia (2014)



# Inclusivity

### Inclusive environments are:

> "characterized by a collective commitment to integrating diverse cultural identities as a source of insight and skill"

#### (Nishii, 2013, p. 1754).

Adapting Joanna Macy's work for building inclusivity in the classroom

"Open Questions"

1. When I found out, I felt the following sensations in my body....

2. I experienced the following emotions...

3. It brought up the following concern or question that....

4. It made me want to take the following action(s)....

## **Reactions from Students**

- > Smiles replacing tears
- > More laughter
- > High fives/hugs
- > Students were able to talk with other students whose views may differ
- > Bolder, braver spaces without anger or judgment and with more open communication

## Creating inclusive spaces in the active classroom

Dr. Jim Pfaendtner Associate Professor Chemical Engineering University of Washington Seattle

# Thermodynamics and inclusivity?!





Ludwig Boltzmann 1844-1906 Credited with development of "molecular thermodynamics" UNIVERSITY of WASHINGTON Boltzmann Pfaendtner 2013 – Credited with chasing the cat and outstanding stress-relief properties

# You tend to increase the entropy of your surroundings

- > Entropy: how much "disorder" is in a system (e.g., a classroom environment)
- > Principle 1: Disordered systems can accomplish many things – but not always what you intend
- > Principle 2: Without additional effort, faculty will make things more disordered

### You control your own destiny about how "entropic" your classrooms are

> Principle 3: Thermodynamics tells us how to decrease the entropy of a system – you have to put in energy (a.k.a. "work")

> Principle 4: Be careful what you wish for – putting in the wrong kind of "work" can still lead to increasing disorder in your classroom!

... I believe the key to getting the most out of your active classroom is maximizing the inclusion of all views, perspectives and personalities

... which is often first to go when things get

GNAZISITY of WASHINGTON

# Task 1: Set the ground rules and stick to them

# Case study: drawing out multilingual graduate students



### **Task 2: Unrelenting engagement**

# Case study: getting smart introverts to teach each other engineering





# How do you know if you are getting the job done?

> Your classrooms are living labs!

> Why not use them to conduct experiments and see if your ideas about engagement and inclusivity are working? Collaborative learning and action to address global environmental issues



#### Dr. Ursula Valdez

Lecturer – Environmental Science School of Interdisciplinary Arts and Sciences University of Washington Bothell



## Current ecological and environmental problems require sound knowledge & local and global actions

#### Infrastructure





#### Gold mining UNIVERSITY of WASHINGTON

Climate Change



**Olympic National Park - Anderson Glacier** 



Pollution (garbage, plastic)



Learning) UNIVERSITY of WASHINGTON

## **Course Structure**

- > Advanced seminars: 10 weekoverlap, 4 Learning modules
- > Synchronized discussions, online discussions, collaborative research projects, use of study cases
- > Propose a collaborative action/solution
- Public communication: Video, magazine or newspaper article, photo essay, art and science
- > Letters to politicians
- > Discussion and field trips with both instructors at each UNI DESITION WASHINGTON





## **Modules: 4 Parallel Stories**

- Biological diversity: regions, species, rainforest (tropical and temperate)
- 2. Fisheries (Salmon vs. Anchovy)
- 3. Use of resources and impacts (i.e. logging and deforestation, gold mining, market crashes)
- 4. Climate change and Mountain ranges (Andes and Cascades)



#### **Collaborative student actions** 1. Activism: Campaign for water resources conservation



Lima 27 de mayo del 2015 Señor Director de la revista SOMOS

Ir. Miró Quesada #300 Lima 1 Perú

e Las portadores de la presente somos un grupo de estudiantes de la facultad de Cancitas y Filcorífa de la Universidad Penuana Cayadana-Heneda en conjunta con file de comunication entesta prescopación cobe la siguiente providentidas un Como estudiantes de biología, nos interesamos por la conservación del medio-amienter y las áreas naturales, si biol el tema que vorne a presentar a confinuación no es una realidad del Penú, es de Interés, para los que preservanos de Colombia.

nca · Columbia · alguna · vez · albergó · una · gran · diven

- uenca Columbia siguna vez altergó una gran divensidad de especies las natuas y protes cantidades este altanomes antadorema, las cuales par en los difines altos este altación dobidos a divense factores, se ha valos meste altacidad proteinadar esta altación dobidos a divense factores, se ha valos Altanosión damadías de 1.8.a. póblaciones de poces, i de samones Altanosión damadías de 1.8.a. póblaciones de jonces. Es de salores Inderdences, astración de supara, pastores, minería, espoisación formadia Manación damadías de 1.8.a. póblaciones de jonces. Es de samones Manación damadías de 1.8.a. póblaciones de jonces. Es de samones dadardences debidos a las convesión de las denglas de las denglas dadardences debidos de las convesión de una de dagazado al dun de ecalópico es altanón. nencial de la coblación humana en las últimas décadas y
- Crecimiento exponencial de la población humana en las últimas décadas y oblaciones remanentes son más pequeñas en tamaño, están menos concetadas por lo que se encuentran reatringidas a nivel espacial religiando menor diversidad dentro y entre las poblaciones que en el asaado. Oblido a la interrupción de la cadena tífica y el uso del hábita para adbidados anterpoentrica crecientes de en los últimos años. In

dades l'aue viven en las zonas aledañas a la cuenca no están todos estos problemas, debido -a -que -no -son -de -cor -ya-que a lo largo de los años se han pasado por alto los daños al ema de la cuenca, además sumémosle a esto que gran parte de la oblación - po-tiene - los - concentos - científicos - básicos - nara zca · a · mayor · profundidad · lo · que · está · suced

medidas política económicas que hagan viable la hábitat en -La - cuenca -de - Columbia -que -se -basa -más -en -lo- econômico puesto -que -el -problema -se -antecede -de -un -alto -costo -proyectado -para restaurar -este - hábitat - cuando - lo -que - sería - necesario - y -efectivo - es -la entación de tecnologías que estén al nivel de restaurar un hábita mo -este -y -no -se -necesariamente -dependa -de -una -mayor -demanda -de nero sino -de-personal capacitado. •1

Restauración - del - hábitat -tanto - dentro - como - fuera - de - la - Cuenca - de Columbia con tecnologías nuevas de restauración e incentivo económico-para los pobladores que han invadido y afectado de alguna forma el hábitat. "En relación -al punto anterior, es imprescivitible que se haga una evaluación de que otras especies, tanto animalas como vegetalas, es belado a que estas suitamas funcionan de manerar conjunta y con la finalidad -de poder restaurantos, es inecesario integrar todos sus comocentes."P

ios conocimientos adecuados y así poder encargarse de los problemas de a zona. Esto es un paso fundamental para trabajar en la recuperación di

evitar futuros daños y una "ocurrencia similar en nuestro territorio, y con la da/de dar a conocer a la población en general esta problemática." amos de antemano muy agradecidos por su fina consideración."

Tania Roma José-Pérez\* Laura-Cadenillas David Severo -· Katty Campos

2.Information booth including remote connection/ video with Peruvian students

Today the UWB students presented a summary of what they learned during this guarter. While their work showed the effort on researching about the topics, they also made a big effort to communicate their work to the general public. It was great!



Armando Valdes-Velasquez, Natalia Ksiezyk Dyba and 3 others like Seen by 28

#### 3. Open letter to a Peruvian magazine on the state of Columbia Watershed and its relation to Peruvian plans of building river dams





Dr. Ellen Moore, Communication – UW Tacoma Dr. Jim Pfaendtner, Chemical Engineering – UW Seattle Dr. Ursula Valdez, Environmental Science – UW Bothell





# Return to the opening question (index card):

What does an inclusive classroom community look like in your context?

Adding to what you wrote earlier: What would you add? Change? What questions remain?

# Thank you!

### Poster Session 2 Begins Now! 3:45-4:30