





# THERE AND BACK AGAIN: A JOURNEY THROUGH LEARNING SPACES

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1.3



1.0

2.5

2.5

1.7

1.5

2.0



# MY RANT AND THE PREMISE OF THIS WORK:

WHAT DO WE  
MEAN BY:

"LECTURE"

"ACTIVE-LEARNING"

"BEST PRACTICES"

"INNOVATION"

"PERFORMANCE"

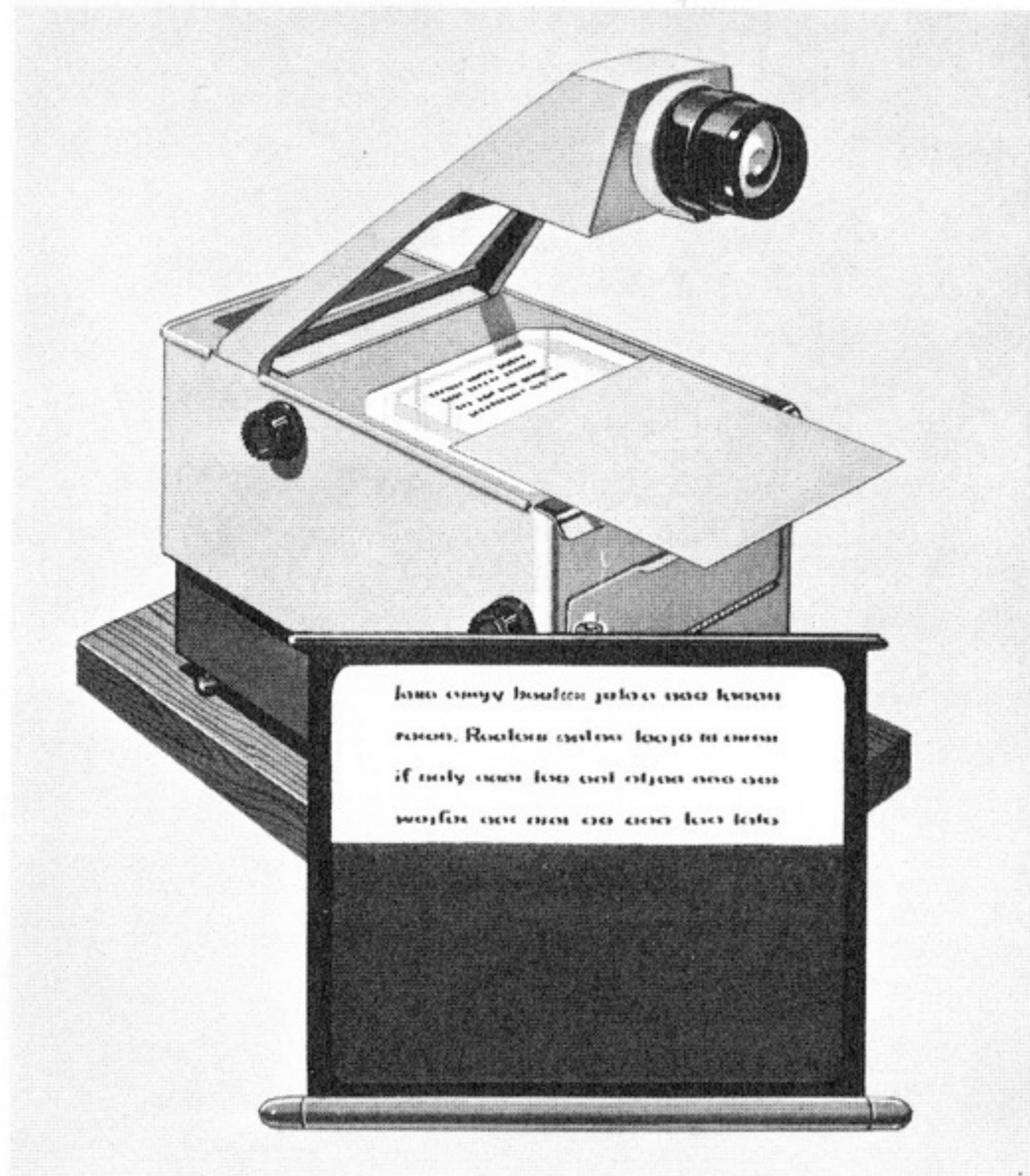
???

*"THERE ARE NO  
PRIMARY EFFECTS."*

ERIC AMSEL

## STEM Best Practices Conference





**Figure 1.11.** Revealing information bit by bit is one of the most effective of all teaching methods to aid students in retention of material, to keep them from being distracted by information not yet presented, but revealed, and to enhance their interest. The overhead projector is ideally suited for this practice.



James Tissot



### The Art of Black and White Photography



169 Reviews

~~\$149~~ **\$10**

[View course](#)



### Improve your Handwriting - Improve your Life



10 Reviews

~~\$79~~ **\$10**

[View course](#)



### Sex Life : Improve your sex life



1 Reviews

~~\$135~~ **\$10**

[View course](#)



### Run a Marathon ( 26.2 mile) With No (or Little) Training



10 Reviews

~~\$297~~ **\$10**

[View course](#)



### Chemistry 101 - Part 1 Principles of Chemistry



10 Reviews

~~\$49~~ **\$10**

[View course](#)



# MY SABBATICAL JOURNEY

A photograph of two hikers on a steep, rocky mountain trail. The hiker in the foreground is wearing a blue jacket and a blue hood, with a large black backpack. The hiker in the background is wearing a red jacket and a red hood, also with a large black backpack. The trail is composed of loose rocks and scree. In the background, there are more rugged mountain peaks, some with patches of snow or ice, and a valley with a small stream and some vegetation.

Premise: We know we learn things in all kinds of contexts, and we value alternate modes of learning. What is there to learn from the variety of learning modes, spaces, and purposes?

# POINTS OF INTEREST

- NATIONAL PARKS: ARCHES, YELLOWSTONE, GRAND TETON, CANYONLANDS, MLK JR. ...
- MANDOLIN PLAYING, MUSIC LESSONS
- YELLOWSTONE COURSE
- 8TH GRADE CLASSROOMS
- ONLINE CHEMISTRY, PHOTOGRAPHY
- ONLINE COLLABORATIONS: RAVELRY, MINECRAFT
- DRESSAGE CLINIC
- WHISKEY MAKING CLASS, COFFEE SCHOOL
- VISIT MY ALMA MATER
- PROFESSIONAL LEARNING: TEACHING WORKSHOPS AND COMMUNITIES
- MUSEUMS: AMNH, MATH MUSEUM, OMSI, WONDERSHOP, GEORGIA AQUARIUM
- TEACHER DAY AT POETRY FESTIVAL
- "SCIENCE IN THE PARKS"
- AAPT, AERA, "SCIENCE EDUCATION AT THE CROSSROADS," ETC
- MARATHON TRAINING
- WRITING
- DANCE CLASS ...

# BORN TO RUN?

## RUNNING CONSIDERATIONS AND ADVICE:

### How do I train for a marathon???

- trail versus road
- heel strike versus toe strike
- carbs and proteins, coconuts and avocados?
- training schedules and tapering schedules
- technology and tools

### My Conclusion:

John McPhee says  
"writing teaches  
writing," so I  
decided that  
"running teaches  
running."

“FREE CHOICE LEARNING”

# MUSEUMS AND PARKS















APPRENTICING

# WHISKEY MAKING CLASS



APPRENTICING

# DRESSAGE



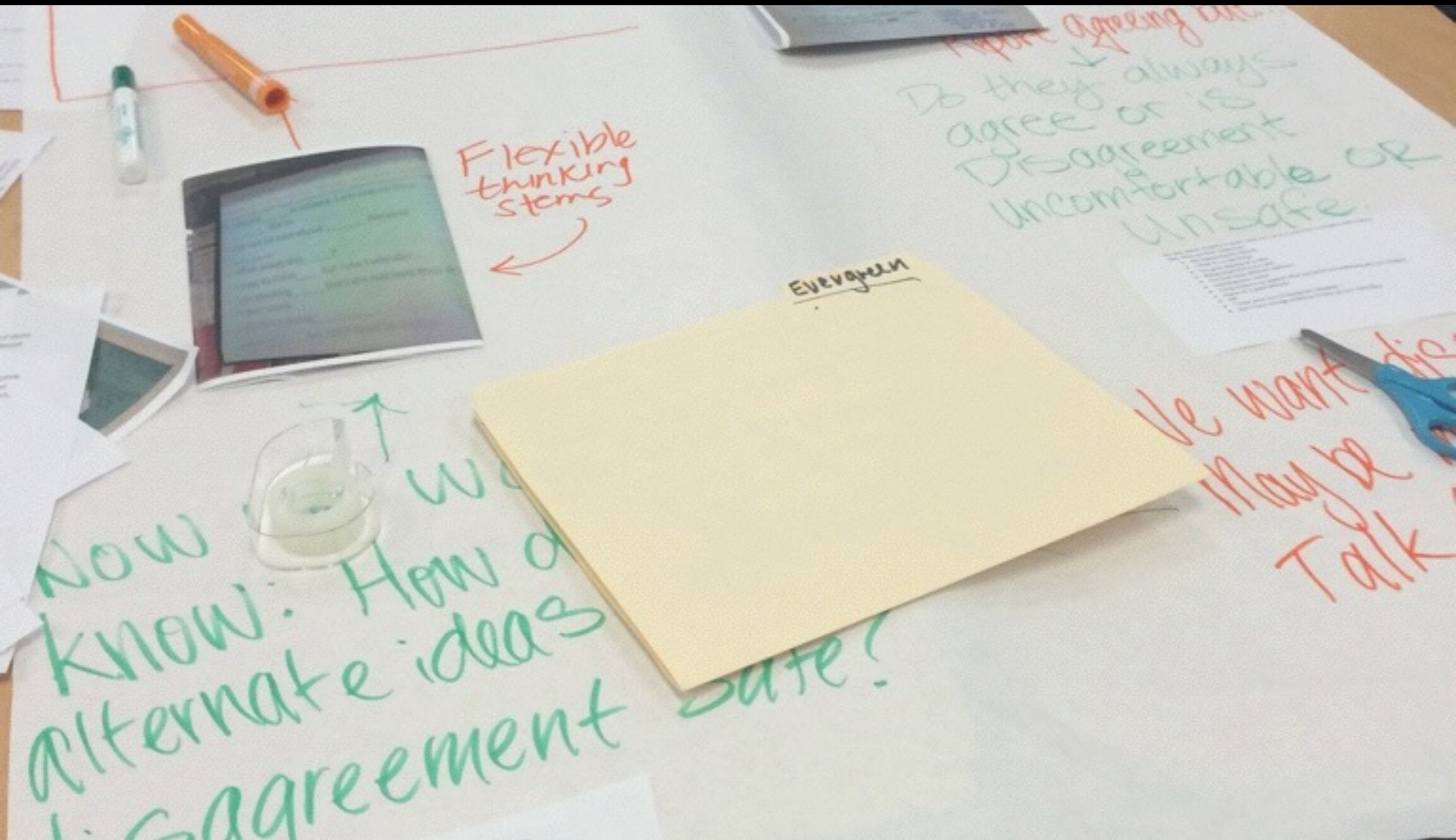
PROFESSIONAL LEARNING

# DODGE POETRY FESTIVAL



PROFESSIONAL LEARNING

# AMBITIOUS SCIENCE TEACHING



CLASSROOMS

"YOU CAN NEVER GO BACK"



CLASSROOMS

# PERSPECTIVE TAKING



CLASSROOMS

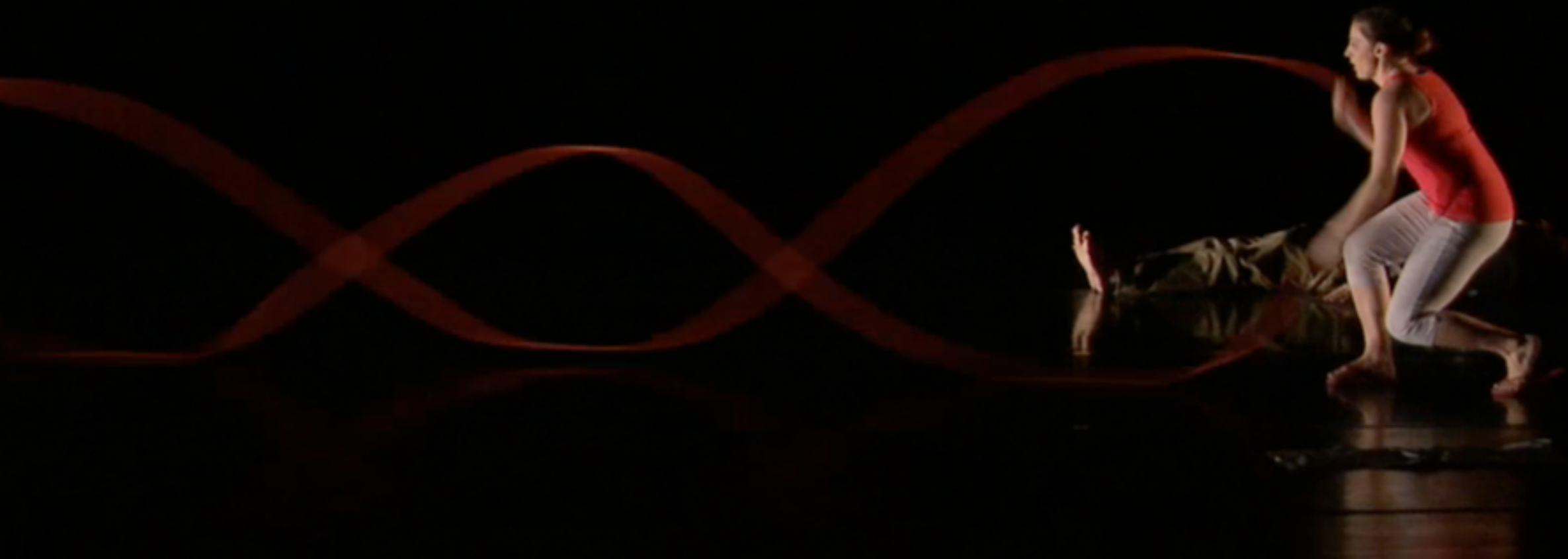
# CULTURAL CUES





# DANCE

see: [dancesciencefest.org](http://dancesciencefest.org)









HIGHLIGHT REEL

# A BODY IN MOTION









# DANCE CLASS IS NOT PHYSICS LAB:

- Sitting on floor; wearing tights
- "Dancers ..."
- Applause
- Group memory of phrases
- Vulnerability
- Responsibility and critique
- "Data" mined from dancers
- Creation and wrong paths





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SCIENCE EDUCATION AT THE CROSSROADS:  
INTERSECTING PERSPECTIVE,  
CULTURE, AND SPACE



## CHALLENGE

Countless positive learning environments include *tools*:  
**trying on perspectives,**  
**sharing cultures, and**  
**exploring spaces.**

**But, these *tools* are also the *goals*.**



**You are here.  
Share perspective,  
shape culture,  
and  
make space.**

