

The Sacred in Science

Practical examples of conventional curriculum topics that have been converted to encourage critical thinking while building character.

Overview

A workshop in six sessions: 1 – *Light*, 2 – *Heat*, 3 – *Motion*, 4 – *Sound*, 5 – *Electricity & Magnetism*, 6 - *The Physical/Spiritual Nature of Science*

Intended audience: Teachers, Pre-service Teachers, Curriculum and Instruction, Education

Instructor: Dr. John Bickart

Prerequisites: none

Web Page: <http://www.bickart.org/>

Description of the Workshop

*This course can be taken as a whole or as separate sessions. Each of the six sessions contain practical science lessons. They deal in common experiences, yet each seeks to express something motivating. How do you know when you are teaching in a sacred, spiritual way? It's really quite simple. First, know that you are already a good teacher. Second, look for chances to learn from your students, so that they can see your gratitude for them. If once in a while you get inspired and have fun with your students, then you are already celebrating **the sacred in science**.*

Overview: The overview can be given as a talk by itself.

Session 1 - *Light*: The Rainbow, Earth and Fire, Colors in the Sun and Sky, Mixing Colors

Session 2 – *Heat*: Fire and Metal, Our Breath and Bubbles, Hot Water and Ice, Growing and Eating and Burning and Composting

Session 3 – *Motion*: Falling and Swinging, Gravity and The Pendulum, Lifting and Jumping and Flying

Session 4 – *Sound*: Music of the Birds and Wind, Listening to the Woods, Sympathetic Vibration

Session 5 – *Electricity & Magnetism*: The Earth's EM Field, Lightning, Bio-Magnetism, Natural Friction and Sparks, Current, Technology

Session 6 – *The Physical/Spiritual Nature of Science*: Matter, Relativity, and Quantum Mechanics

Bio for The Sacred in Science Workshops

The sacred or spiritual in my life ... what does that mean? I think it means looking at nature and being grateful for whatever is fun or inspiring or beautiful for me. You know – whatever engenders wonder and awe, as I experienced when I was a child. I think being sacred is simply being present, observing, and enjoying. I've taught children in private and public schools, and adults in schools, corporations, and state prisons. What they have taught me about spirituality can be summed up in three sentences.

One way to see the genius in your student, is for you, yourself to continually be grateful as you learn new things from everything around you, including your student; but sometimes this means that you have to stop your thinking and just observe.

"If children grew up according to early indications, we should have nothing but geniuses." (Goethe, 2016/1882)

"The simple reason why the majority of scientists are not creative is not because they don't know how to think; but because they don't know how to stop thinking." (Tolle, 2011)



development.

Led by John Bickart. John is an over half century veteran teacher of both children and adults. He is also an educational consultant. His goal as a teacher is to work in the background while letting good ideas speak for themselves. He believes that teachers and students know what they want and that we empower ourselves when we listen to our hearts. He values helping his students transform personally over simply passing along information. His professional offerings include: higher ed. pre-service teacher preparation, in-service teacher workshops, high/middle school science and math for youth at risk, science topics for incarcerated individuals, and educational software

The Sacred in Science: *Overview*

1. Sacred Teaching in a nutshell ...

"Tell me, and I will forget. Show me, and I may remember. Involve me, and I will understand." Chinese Proverb

- *Tell* what is coming by setting the mood, not explaining concepts, yet.
- *Show* so that students can mindfully attend the experience, without too much explanation.
- *Repeat* the experience in your mind, still not analyzing and naming. Just re-create it with your imagination, like a movie.
- *Reflect* on what happened. Perhaps within the lesson, or perhaps later – even the next day. If the students took it in mindfully, perhaps in the last night's sleep, they may have had depth added to their perspective. These reflections can include descriptions of what happened physically, why it happened, how we can use or control it, or even how to make money from it. But these reflections might also transcend the mechanical explanation to honor the *wonder* and *awe* in an event.
- Sacred Teaching is nothing new. It is the way of our ancient ancestors. Said another way, it is the way of the child in all of us. But at this time in history, perhaps it is also the way of the future – the way of *The Next Version* of humankind.

"For out of the overflow of his heart his mouth speaks." (Christ)

"He who knows the Way does not speak about it; he who is ever ready to speak about it does not know it." (Tzu, 2012/circa 500 BC, Verse 56)

For a reference to *current writers on the hoped for, next version of humankind*, go to "Good Reading" on <http://www.bickart.org/>.

References

- Goethe, J. W. v. (2016/1882). *The Autobiography of Goethe: Truth and Poetry From My Own Life*. Dinslaken: Anboco.
- Tolle, E. (2011). *The power of now: a guide to spiritual enlightenment*. Sydney: Hodder Headline Australia.
- Tzu, L. (2012/circa 500 BC). *Tao te ching*. Savannah, GA: Green King Press.