



“The mind cannot forget what the hands have learned.”[™]

Welcome to the inaugural edition of the *Anatomy in Clay*[®] Newsletter. This publication will keep you connected with fellow educators, providing innovative tips, proven techniques, and valuable information for successful hands-on anatomy teaching. Our goal is for this to be an effective resource and tool, driven by you, to share and explore anatomy teaching ideas and concepts.



FEATURED TEACHER

Starla Ewan “Learning the Body by Building It”

Many readers familiar with the Anatomy in Clay[®] Learning System know Starla Ewan from one of our conference exhibit booths or conducting workshops at any number of professional meetings. She is also the co-author (with Jon Zahourek) of *Starla on Maniken*[®] *Teacher’s Guide*, a curriculum for using this hands-on

concept.

Starla has been an anatomy teacher for over twenty-eight years, spending the last eighteen at Estacado High School in Lubbock, Texas, where she has been instrumental in developing a career-oriented health-care curriculum. She discovered our system at a college anatomy conference in 1995 and immediately saw its potential for

use in her school. Since then she has taught hundreds of teachers the value of kinesthetic learning. It’s no surprise that Starla’s classroom success in using a hands-on approach to learning is the foundation for her advocacy of Anatomy in Clay[®] Learning System. She notes, “Most students learn anatomy through either worksheets or dissection. The problem with that is, it ends up being a memorization game. By using hands-on clay the students actually build a muscle according to function and they learn by building it. Hands-on clay learning reinforces concepts, not memorization.”

Her warm, humorous teaching style has captivated students — of all ages — and helped them become more active and engaged learners. Starla has been known to tell students: “You are not going to be the same person when you leave this class. You are going to gain study skills that will help you in all your other classes and it will give you confidence throughout your life.”



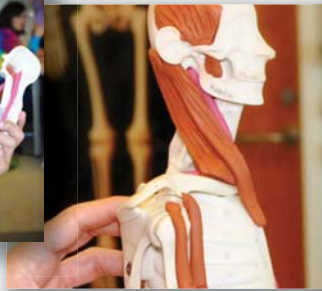
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Do you have your own success story about using hands-on learning? Contact us at: info@anatomyinclay.com



© Zahourek Systems, Inc. All Rights Reserved. Anatomy in Clay[®] work of Michelle Goodwine's students at Fort Collins High School in Fort Collins, Colorado, using Maniken[®] models. Photos by JulieArt.



EVENT SCHEDULE

- **Anatomy in Clay[®]**
Professional Development Workshop
May 6-7 San Diego, CA
www.sweetwaterschools.org
- **HAPS** Workshop/Conference
May 27-June 3 Victoria, BC
www.hapsweb.org
- **HOSA** Workshop/Conference
June 22-24 Anaheim, CA
www.hosa.org
- **Anatomy in Clay[®]**
Professional Development Workshop
June 29-30 Denver, CO
www.anatomyinclay.com
- **TCEC** Workshop/Conference
July 17-20 Dallas, TX
www.texascareereducationconference.com
- **Colorado ACTE** Workshop/Conference
July 18-20 Loveland, CO
www.cacte.org
- **HSTW** Workshop/Conference
July 20-23 Nashville, TN
www.sreb.org/page/1142/summer_conference.html
- **Washington ACTE** Workshop/Conference
August 14-17 Seattle, WA
www.wa-acte.org
- **STEMtech** Workshop/Conference
October 2-5 Indianapolis, IN
www.league.org/stemtech
- **New Jersey Science Convention**
Workshop/Conference
October 11-10 Somerset, NJ
www.njsc-online.com



- **NABT** Workshop/Conference
October 12-15 Anaheim, CA
www.nabt.org
- **FAST** Workshop/Conference
October 20-22 Kissimmee, FL
www.fastscience.org
- **NSTA** Workshop/Conference
October 27-29 Hartford, CT
www.nsta.org
- **STANYS** Workshop/Conference
November 7-9 Rochester, NY
www.stanys.org
- **NMSA** Workshop/Conference
November 10-11 Louisville, KY
www.nmsa.org
- **ACTE** Workshop/Conference/
½ Day Professional Development
November 17-19 St. Louis, MO
www.acteonline.org
- **Texas CAST** Workshop/Conference
November 17-19 Dallas, TX
www.statweb.org
- **PSTA** Workshop/Conference
November 30-December 2
Hershey, PA
www.pascience.org
- **2012 NSTA**
Workshop/Conference
March 29-April 2, 2012
Indianapolis, IN
www.nsta.org



Can't make it to one of these events? Contact us to host your own Professional Development:

info@anatomyinclay.com

1-800-950-5025



Our New Education Center

Beginning in June 2011, Anatomy in Clay[®] Workshops will be held in our new facility in Denver, the Studios at Overland Crossing. Built in the late 1800s, this historic brick structure was a railroad warehouse and been home to an appliance foundry, an ornamental plaster manufacturer, and a wholesale pottery business. Restoration is underway, providing us with several large spaces for classes, demonstrations, and special events. The facility will also be home base for the Zoologik[®] Foundation and Jon Zahourek studios.

We look forward to seeing you here.



FEATURED EVENT

Anatomy in Clay[®] Learning System Professional Development

June 29-30, 2011 | 8:00 AM to 4:00 PM | Denver, Colorado

Reignite your health science and anatomy instruction with engaging, interactive, hands-on teaching!

Program Description

In this two-day professional development workshop, attendees will learn human anatomy using clay and Maniken[®] Student skeletal models. The goal: Explore anatomy from the inside out! Educators will learn how to implement the Anatomy in Clay[®] Learning System, a unique curriculum program which helps students create a kinesthetic map of the human body. Acquire the knowledge to engage health science students with immediate, hands-on learning using a proven method that is nationally recognized to increase retention and test scores.

The workshop will emphasize the skeletal system, exploring directional terms and muscle and bone morphology, as well as concepts that will lead into other body systems. It will also demonstrate how to create true inspiration in the classroom, with results that can guide students into the world of medicine and health-related careers. This is an amazing discovery of interactive teaching and learning, with decades of verifiable results.

Who should attend

The Anatomy in Clay[®] Professional Development workshop is an intense, hands-on experience oriented for educators in secondary schools, community colleges, and colleges/universities.

Location / Date

Anatomy in Clay[®] Center of Denver
2201 S. Delaware Street, Denver, CO 80223
June 29-30, 2011

Workshop Presenter

Tracy Wiese | Educator Liaison
Assisted by Tammy Crain | Educator Liaison

Registration Fees / Information

Fee for the 2-day workshop is \$200. Fee includes lunch and use of a skeletal model and clay during the workshop. After June 8th, the late registration fee will be \$300. For more information or to reserve a seat:

info@anatomyinclay.com 800-950-5025



JON ZAHOUREK

The Man Behind the Models

Drawing for artists relies on the basic — and fundamental — concept of anatomy. As an artist teaching anatomy to other artists in New York City, Jon Zahourek sculpted a scale-model skeleton to use for demonstrating muscles made of clay. In building this skeleton, he was stunned to realize that he began to understand better the material he had previously taught from memorization.

The educational success of this approach was overwhelming. The activity involved in learning — the hands-on development of the body in clay — seemed to him to also develop far better understanding in his students than either rote memorization or dissection, the traditional methods of anatomy study. The experience also boosted self-confidence among those doing the building. Subsequently, Jon suspended his art career to develop the research, design, and manufacture necessary to share this innovation with the world.

This enterprise has also led to an unexpected passion, the role of self-awareness in personal growth and competence. Zahourek's method has found that hands-on learning of anatomy leads to an expanded self-awareness of the body. In Jon's philosophy, bodies serve as a universal interface with the world; they are the source of nearly all of our experience on the planet. Knowledge of the form

and function of our anatomy is essential to our awareness of ourselves and of our world, a quest that has always been part of humanity and cultures.

In order to move, nature equipped humans with a systematically "armed" anatomical form, fitted with arrays of body extensions that require a synthesis of body and mind to function successfully. Movement is key to the nature of humans within nature; anatomical and biomechanical talents literally embody this interface. But unlike other animals, movement and interaction comes with an awareness of the world — a cognitive model that can be expanded through an understanding of anatomy.



Jon Zahourek working in his studio circa 1982-1983.

Jon states, "Anatomy is a fundamental tool for future success — for individuals and society. Yet traditionally, the study of anatomy

and its functions has been delegated to specialists, an elite group with a limited ability to share what they know with nonprofessionals. The resulting knowledge gap deprives us of core knowledge that can improve lives and magnify self-awareness. To promote self-awareness, self-awareness of anatomy is essential."

To learn more about the importance of hands-on learning of anatomy, join Jon and his mission/vision with the Zoologik[®] Foundation.

www.zoologikfoundation.org

DID YOU KNOW?

The ancient Greek physician Galen (131 AD–201 AD) deserves credit as one of the founding fathers of anatomy, as his work was a key



step in establishing standards for the internal structures of the body and how they worked.

Trained in Alexandria and Smyrna in Asia Minor, he achieved notoriety early as a surgeon to Roman gladiators, eventually leading to an appointment as personal physician to Emperor Marcus Aurelius. He spent most of his career in Rome. Galen's forte was observation and logic, developing his knowledge from hands-on learning and experimentation, including extensive animal dissections. Forbidden by Roman law from dissecting human bodies, he mischaracterized as

human some of the variations he noted in extensive dissections and study of other animals, yet he got much more right than previous physicians. One key discovery was that blood is carried through bodies by the arteries. Extensive publishing helped spread Galen's concepts. One of the fundamental benefits he brought to medicine was the value of experimentation, as well as advocating the necessity of philosophy, logic, and ethics in the practice of medicine.