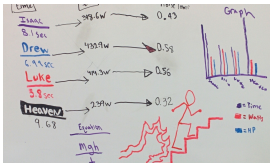
June 3-14
Biology and Chemistry

June 17-28
Physics and Middle School

8 am - 3 pm, Mon-Fri
NORTH HIGH SCHOOL
15331 Hwy. 41 North
Evansville, IN



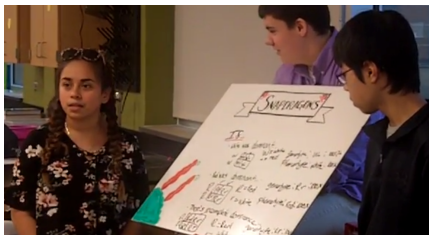
MODELING INSTRUCTION is designed as an *Exemplary secondary science program & Promising Technology program* by the U.S. Dept. of Education. It is rated an *Accomplished STEM program by Change the Equation*.

MODELING

What is Modeling Instruction?

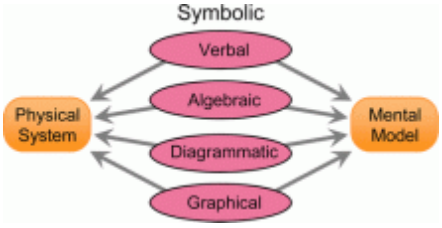
From its inception, the Modeling Instruction program has been concerned with reforming high school physics teaching to make it more coherent and student-centered, and to incorporate the computer as an essential tool for scientific learning. It applies structured inquiry techniques to the teaching of basic skills: (the Next Generation Science Standards call these Science and Engineering Practices) in mathematical modeling, these include proportional reasoning, quantitative estimation and technology-enabled data collection and analysis.

The Evidence



As science teachers, we like to see evidence before we accept claims. The evidence that modeling instruction is effective is already strong, and growing each year.

The effectiveness of modeling instruction in enhancing student learning of physics is being continuously evaluated with well-established standardized instruments. Chief among these instruments is the Force Concept Inventory (FCI). The FCI assesses the effectiveness of mechanics courses in meeting a minimal teaching performance standard: to teach students to reliably discriminate between the applicability of scientific concepts and naive alternatives in common physical situations. Questions on the FCI were designed to be meaningful to students without formal training in mechanics.



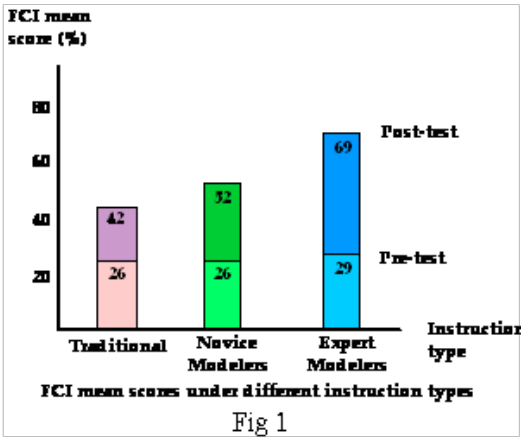


Fig 1

In modeling, the students start with a "scientific concept" and then use several "representations" to come up with a "mental model." They are not just symbolic links, they are real learning links utilized to make the mental model.

Modeling has also branched out to now include biology, chemistry and Middle School.

EVSC will have all 4 this summer!

An independent description of Modeling by Paul Andersen of Bozeman Science at: http://bit.ly/2kPB01m (Posted 1/7/17, 7 mins)

For more info: AMTA, American Modeling Teachers Assoc.
http://modelinginstruction.org/ http://modeling.asu.edu/
AMTA Summer Workshops: http://bit.ly/AMTA2019

Evansville Workshops, Monday-Friday from 8am - 3 pm

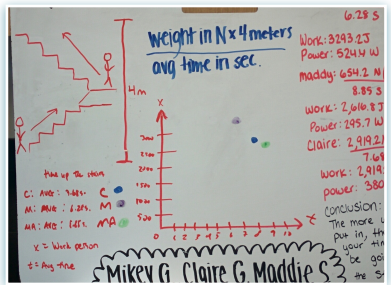
June 3-7 and 10-14

Workshop	Leaders
Biology	Melissa Nolan and Clarissa Furlong
Chemistry	Amanda Horan

June 17-21 and 24-28

Workshop	Leaders
Physics (Mechanics)	Hugh Ross and Mike Kelley
Middle School	Christi Mendoza and Rachel Kent

Cost: $700 per workshop
Registration Deadline: April 1, 2019
Payment Deadline: May 1, 2019
Register at: **http://bit.ly/IndianaModeling2019**
(NOTE: Space is limited and registrants will be notified ASAP to confirm.)



Modelers' Stories

Biology Modeling has completely changed the way I teach. I can't believe how much growth I've seen in my students since I started modeling. Students learn so much from each other by evaluating their own answers and models. I won't ever go back to my "old" way of teaching.

-Crystal Steinmetz
Science Teacher
Bosse HS, Evansville, IN

Modeling has transformed my classroom into an environment where the student's thinking drives the instruction and pushes my students to make connections with new material.

-Sarah Bohrer
Biology Teacher
North HS, Evansville, IN

Hosted by
Evansville Vanderburgh School Corporation
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On-Site Coordinators
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