



Modeling Teachers International

Supporting and connecting science educators across the globe

MTI Newsletter, February 2026

Hello Everyone,

Greetings from all of us at *Modeling Teachers International* (MTI)! The purpose of newsletter is to update you on the latest MTI news, activities, and opportunities.

Who are we?

MTI is the international affiliate of [American Modeling Teachers Association](#) and US 501c3 non-profit organization. Our mission is to create and implement programs that support science teachers *outside* the continental U.S. who use model-based approaches to science instruction in their classrooms. This includes the *Modeling Method of Instruction (Model Didactics)*, an approach to science instruction that highlights the importance of science models and modeling in science learning pioneered by Dr. David Hestenes at Arizona State University.

Our membership spans the globe, including active members from such beautiful countries as Australia, Canada, Croatia, Egypt, Germany, Hong Kong, Jordan, Latvia, Netherlands, New Zealand, Saudi Arabia, Slavic Republic, Turkey, and the US.

You are invited to join our private online groups:

[MTI Facebook group](#)

[MTI LinkedIn page](#)

You are also invited to join our growing MTI *WhatsApp* group. Email your *WhatsApp* contact information to the MTI: modelingteachersinternational@gmail.com

How do I become a MTI member?

If you are receiving this newsletter, you are *already* an MTI member!

Have friends or colleagues who might be interested in MTI? Ask them to email us (subject line: MTI membership). If at any time you would like to opt-out of MTI membership and communications, please email us. *MTI membership is absolutely free!*



Netherlands physics teachers explore the topic of circular motion during a Model Didactics workshop sponsored by Modeling Teachers International (November 2025).

Model Didactics Netherlands Workshop (November 17-18, 2025)

Last November, I teamed up with the Netherlands *Model Didactics* group to give a two-day *Model Didactics* (Modeling Method of Instruction) workshop. The workshop was co-sponsored by the Netherlands science-education groups *NVON* and *Betapartners*; and hosted by the remarkable *Amsterdams Lyceum* in Amsterdam!

Day 1: I introduced the Model Didactics (Modeling Method of Instruction) methodology using activities on inclined-plane motion and circular motion.

Day 2: Onne Slooten, Cathy Baars, Wilfred van Elsäcker, and Wouter Spaan illustrated the method further through a range of topics, including: radioactivity, spring launched hover pucks, falling paper lids, and simple circuits.

One participant wrote:

After two days of being immersed in meaningful, colorful, and memorable experiences, I was glowing with joy, fulfilment, and precious memories, not only valuable for my professional life.

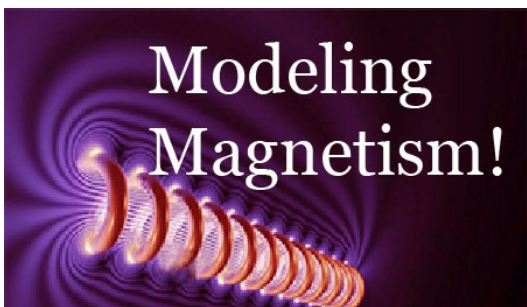
Special thanks to Liliane Bouma and Onne Slooten for organizing this amazing event!

Latvia Modeling Workshop (March 27-28, 2026) *You are invited!*

This spring, I am honored to visit the idyllic Latvia to give four days of presentations at the University of Latvia, including a two-day professional development workshop. The workshop will provide an introduction the Modeling Method of Instruction (Model Didactics) for pre-university and university faculty.

We will update the [MTI website](#) with workshop information and a registration link soon. MTI members will also be updated by email. Have initial questions? Contact: Dr. Jelena Kosmača (Latvijas universitāte) at: jelena.kosmaca@lu.lv

Spring 2026 Online Course on the Modeling Method of Instruction (Model Didactics)



We are proud to announce the Spring 2026 offering of the online-asynchronous course, *Modeling Method of Instruction (Model Didactics): Theory and Practice with Examples from Magnetism*.

Course content is divided into 4 topic blocks and spread over 8 weeks between March 2 and June 29, 2026. Between each two-week topic block, participants perform small tasks to apply their learning in their classroom.



Netherlands physics teachers participate in a whiteboard discussion (November 2025).

During the course, we'll explore basic questions such as: What is a scientific model? What does scientific modeling look like in the science classroom? How can a focus on scientific models and modeling improve science learning?

Visit the [MTI website](#) for the detailed course schedule, syllabus, and registration form.

Artificial Intelligence and Modeling: Spencer Grant

MTI submitted a Spencer Foundation *Vision Grants* proposal entitled, *Model-Based Inquiry and AI for Everyone*. This research proposal requests funding for one-year period to explore the potential of AI to support science-teacher professional development. Below is our illustrious research team!

Principal Investigator

Mark Lattery (Modeling Teachers International, US)

Co-Principal Investigators

Karriman Abdelgawad (Zagazig University, Egypt)

Cathy Baars (Martinuscollege, Netherlands)

Inese Dudareva (University of Latvia, Latvia)

Jeff Elmer (Modeling Teachers International, US)

Jelena Kosmača (University of Latvia, Latvia)

Colleen Megowan-Romanowicz (AMTA, US)

Hamdy Mohamed (Minia University, Egypt)

Onne Slooten (Het Amsterdams Lyceum, Netherlands)

Mandana Sobhanzadeh (Mount Royal University, Canada)



Netherlands physics teachers discuss a problem (November 2025).

International Journal of Modeling in Science Education

In 2026, MTI will be launching the peer-reviewed electronic journal, *International Journal of Modeling in Science Education* (IJMSE). The purpose of this journal is to publish teaching concepts and ideas, classroom action research, and formal research studies that explores the use of model-based inquiry (such as the Modeling Method of Instruction) in the science classroom. Review articles are especially encouraged.

For the Fall 2026 issue, the manuscript submission deadline is **June 1, 2026**. Please send paper ideas and final manuscripts (PDF format; 12-point font; Calibri, Arial, or Times; single-spaced; and standard margins) to Dr. Mark Lattery (IJMSE Editor) at: modelingteachersinternational@gmail.com

Current Research on Modeling in Science Education

Malone, K. & Schuchardt, A. (2023). Modelling-based pedagogy as a theme across science disciplines: Effects on scientific reasoning and content understanding. *European Journal of Science and Mathematics Education*, 11 (4). This paper studies the effects of the use of modelling-based pedagogy in a longitudinal comparative case study on students' scientific-reasoning skills using hierarchical linear modeling

Margolin, J., Pinerua, I., & Gerdeman, D. (2002). Modeling in Science Education: A synthesis of recent discovery research preK-12 projects. *American Institute of Physics*. This report reviews eighteen model-centered student projects, including impacts on student scientific knowledge, skills, and attitudes.

Use your artistic superpowers for good!

Are you an artist with strong drawing skills *and* a love for model-based approaches to science instruction? MIT seeks a volunteer artist to complete a set of educational graphics on the *Modeling Method of Instruction*. Experience with *Adobe Illustrator* and Bezier curves desired.



Upcoming GIREP-MPTL 2026 Conference (July 6-10, 2026)

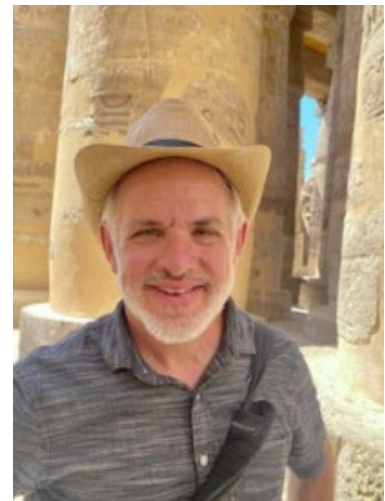
The GIREP-MPTL 2026 Conference will be held in Rethymno, Crete, Greece. The conference will run from July 6-10, 2026, and is organized jointly by the *International Research Group on Physics Teaching* (GIREP), *Multimedia in Physics Teaching and Learning* (MPTL), and the *Science Teaching Lab* (ΕΔΘΕ) of the Department of Primary Education, University of Crete (UoC). For more information, visit: <http://www.girep.org>

Help us grow!

Modeling Teachers International is a U.S. non-profit 501(c)(3) organization. Donations by US citizens are tax-deductible. We seek funds to

- provide scholarships for teachers to participate in professional development workshops and courses
- create new workshops and courses on the modeling method of instruction
- sponsor and organize conferences on model-based inquiry
- create and maintain of the new journal, *IJMSE*

If you would like to donate to MTI, please click “Get Involved / Donate” in the upper right of the [MTI webpage](#) (link below). All major credit cards are accepted. (For US citizens, donations are tax deductible.) No donation is too small!



Serving science teachers together,



Mark

Dr. Mark Lattery

MTI President and Founding Member

Email: modelingteachersinternational@gmail.com

Webpage: <https://modelingteachersinternational.org/>