Science and Mathematics Learning Technologies in Education:
Innovation and Pedagogical Aspects

March 26, 2018 | Weizmann Institute of Science

09:00 *Registration and Refreshments*

09:00–09:15 Greetings
Prof. Anat Yarden, Weizmann Institute of Science

09:15–10:15 Opening Session
Prof. Gail Jones, NC State University
Keynote lecture: Presence, Development and Visualization: Learning Science with Haptic and Virtual Reality Technologies

10:15–10:35 *Coffee Break*

10:35–11:45 Parallel Sessions
Chair: **Ella Yonai**, Weizmann Institute of Science

Experiences from the classroom: Tangram-based puzzle as a tool for developing geometric thinking levels in a technological and tangible environments
Huda Shayeb and **Michal Tabach**, Tel-Aviv University

Visual skills and their importance in teaching and in online exams in biology
Rivka Misgav, Biology moderator and MSc student in The Rothschild-Weizmann Program

Learning Genetics on the Fly: Interrelating Three Conceptual Models in Genetics
Michal haskel-Ittah, Weizmann Institute of Science & Rutgers, The State University of New Jersey
Anat Yarden, Weizmann Institute of Science

10:35–11:45 Chair: **Emil Eidin**, Weizmann Institute of Science

Chemical Education Workshop: Experiencing Molecular Models of Matter
Sharona T. Levy, University of Haifa
Elon Langbeheim, Weizmann Institute of Science
Sigal Samon, **Asnat Zohar** and **Janan Saba**, University of Haifa

10:35–11:45 Chair: **Yael Feldman-Maggor**, Weizmann Institute of Science, The Open University of Israel

Innovation in learning technology: Educational Data Mining for Analytics and Adaptivity in Online Learning Environments
Giora Alexandron, Weizmann Institute of Science

Cultivating Perspective Taking through Game Making Minducate Center for the Science of Learning
Gidi Dishon, Tel Aviv University

Ecological learning of a foreign language in a virtual reality environment
Orly Fuhrman, The Center for Educational Technology

11:45–12:30 Panel: Scientific online courses in the eyes of participating students
Chair: **Rachel Rosanne Eidelman**, Weizmann Institute of Science

12:30–13:30 *Lunch Break*

13:30–14:15 Parallel Sessions

Chair: **Gil Schwarts**, Weizmann Institute of Science
Workshop: Mathematic Education Research Perimeter - More Points of View
Gali Shimoni, Israel Center for Excellence through Education

13:30–14:15 Chair: **Ohad Levkovich**, Weizmann Institute of Science

Workshop: Online modeling tool Using a free Online Modeling Tool
Tom Bielik, Michigan State University

14:15–15:15 Closing session

14:15–15:00 **Avi Warshavsky**, MindCET CEO
Startup, Evolution and the Future of Education: Educational Technological Entrepreneurship

15:00–15:15 Summary

The conference was organized by research students from the department of science teaching with support of the academic staff

Organizing Committee

Yael Feldman-Maggor
Weizmann Institute of Science
The Open University of Israel

Asaf Bar Yosef
Weizmann Institute of Science

Ella Yonai
Weizmann Institute of Science

Emanuel Eidin
Weizmann Institute of Science

Gil Schwarts
Weizmann Institute of Science

Rachel Rosanne Eidelman
Weizmann Institute of Science

Dr. Shelley Rap
Weizmann Institute of Science

Shira Liberti
Weizmann Institute of Science

Scientific Staff

Prof. David Fortus
Weizmann Institute of Science

Dr. Zahava Scherz
Weizmann Institute of Science

Coordinator & Accessibility Issues

Reut Hershenhoren
reut.hershenhoren@weizmann.ac.il

Website & Registration
www.weizmann.ac.il/conferences/IOT2018