ZEHAVIT KOHEN – RESUME

May 2025

1. PERSONAL DETAILS

Zehavit Kohen, PhD
ID: 03729200-0
Year of birth: 1980
Marital status: Married + 4 children
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Google Scholar Profile; Personal website

2. ACADEMIC DEGREES

2011	Ph.D. (direct track), Education, Suma Cum Laude, Bar-Ilan University
2005	M.A. (received in the process of direct track towards Ph.D), Educational Technology, Cum Laude, Bar-Ilan University
2003	B.Sc., Computer Science and Mathematics, Bar-Ilan University
2003	Teaching Certificate, Computer Science, Cum Laude, Bar-Ilan University

3. ACADEMIC APPOINTMENTS

July 2024- date	Associate Professor, Faculty of Education in Science and Technology, Technion, Israel Institute of Technology
June 2020-June 2024	Assistant Professor, Faculty of Education in Science and Technology, Technion, Israel Institute of Technology
October 2017-May 2020	Lecturer, Faculty of Education in Science and Technology, Technion, Israel Institute of Technology
April 2017-September 2017	Visiting Scientist and Administrative Appointment, Faculty of Education in Science and Technology, Technion, Israel Institute of Technology
July 2015-January 2016	Visiting Scholar at the Center to Support Excellence in Teaching (CSET), Stanford University, California, USA. Host: Prof. Hilda Borko, Professor of Education, School of Education, Stanford University

4. PROFESIONAL EXPERIENCE

2013-March 2017[1]	Research Associate, Samuel Neaman Institute, Technion, Israel Institute of Technology
2012-13, 2016-March 2017[1]	Researcher, Faculty of Education in Science and Technology, Technion Research and Development Foundation, Israel Institute of Technology
2010-March 2017[1]	Adjunct Lecturer of *Quantitative Research* for M.A. students and *Statistics and Research methods* for B.A. students, Bar-Ilan University
2013-June 2015	Researcher at the Research Authority, Levinsky College of Education and Lecturer and Adjunct Lecturer and Advisor for M.Ed. final projects, Levinsky College of Education
2011-2013	Adjunct Lecturer of *Quantitative Research* for M.Ed. students, Levinsky College of Education

[1] With an academic break between July 2015-January 2016 – Visiting scholar at Stanford University.

5. PROFESIONAL EXPERIENCE (outside academia)

2003-2005	Mathematics teacher for high-school students (10^{th}-12^{th} grades), Preparation for matriculation exams, Blich municipal high school, Ramat-Gan and Lazarus Community Center, Holon
2002	Teacher, Institute for advancement of mathematics, Ramat-Gan
1998-2000	Instructor, *Computer Applications*, Israeli Signal Corps, Sergeant, IDF

6. RESEARCH INTERESTS

- Mathematics teachers' education and development.
- Mathematical modelling in authentic STEM contexts.

7. TEACHING EXPERIENCE

218007 – Advanced Quantitative Research Methods (supervision)	Graduate course
218125 – Seminar in Mathematical Education	Graduate course
218131 – Mathematics Curriculum Development Project	Graduate course
216009 – Quantitative Research Methods (supervision)	Undergraduate & graduate course
216125 – Advanced Assessment Methods in Mathematics Education (supervision)[2]	Undergraduate & graduate course
216156 – Educational Mathematical modelling in a STEM context	Undergraduate & graduate course
214235 – Practicum in Mathematics Teaching	Undergraduate course (2018-2021)

8. TECHNION ACTIVITIES

2022–today	Member of the Technion Interdisciplinary Committee on Applied Mathematics.
2024-25	Participation in the "Leading in the Academy" program at the Technion

9. FACULTY ACTIVITIES

2017-today	Academic supervisor and student counselor for the Mathematics Education track at the high-school level.
2019-today	Representative of the Faculty of Education in Science and Technology in the Faculty of Mathematics Faculty committees.

10. PUBLIC PROFESSIONAL ACTIVITIES

National Committees

2017-today[3]	***National Committee for Mathematics Curriculum***, appointed by the Minister of Education, Israel – Committee member.
2025-today	***National Committee for Revising the Middle School Mathematics Curriculum***, appointed by the Minister of Education, Israel – Committee member.
2025	Judging Committee for Master's Degree Program in STEM education, Kaye Academic College of Education

[2] 2023-24 – Funded partially by the Social Hub at the Technion.

[3] The chief subject matter supervisor has not convened the committee since 2021.

Reviewer for Academic Journals

2018-today	Educational Studies in Mathematics, Instructional Science; International Journal of STEM Education; Journal for Research in Mathematics Education; Journal of Mathematics Teacher Education; Journal of Research in Science Teaching; Teaching and Teacher Education; Technology, Knowledge and Learning; ZDM Mathematics Education.

11. MEMBERSHIP IN PROFESSIONAL SOCIETIES

PME – the International Group for the Psychology of Mathematics, http://www.igpme.org/

ICME – International Congress on Mathematical Education, https://www.mathunion.org/icmi/organization/overview-icmi

ERME – the European society for Research in Mathematics Education. http://erme.site/

JCRME – Jerusalem Conference on Research in Mathematics Education, https://sites.google.com/view/rmei/jcrme

NARST – a worldwide organization for improving science teaching and learning through research, www.narst.org

EARLI – The European Association for Research on Learning and Instruction, SIG 11 – Teaching and Teacher Education Interest Group, https://www.earli.org/

12. FELLOWSHIPS, AWARDS AND HONORS

2023	Excellence flag bearer in education in celebration of the 75th Israeli Independence Anniversary, the Trump Foundation
2014, 2017	Classroom teachers and international committee scholarships, NARST
2009	Outstanding Paper Award. Paper presented at the 12th annual JURE Conference, and won the Award at the Metacognition Symposium at the 13th Biennial Conference, EARLI, Amsterdam, The Netherlands.
2005-2009	President's Scholarship for Outstanding Doctoral Students, Bar-Ilan University ($40,000)

13. GRADUATE STUDENTS

Technion, Israel Institute of Technology

Completed PhD theses

1. Nelly Keller. Mathematics teachers as self-regulated learners and mentors in online problem-solving forums (with co-advisor: Prof. Boris Koichu). Candidacy exam: March, 2019. Graduated April 2023.

Completed MSc theses

2. Doron Orenstein. Integrating Hi-Tech related authentic problems in secondary school mathematics teaching. Graduated February 2020. Won 1st prize for the Faculty Outstanding Graduate Poster Award. Poster presented at the 2018-19 competition at the Faculty of Education in Science and Technology, Technion.

3. Halima Sharkia. Flipped classroom in mathematics education: Its effect on conceptual understanding and motivation among Israeli Arab high-school students. Graduated February 2021, Cum Laude. Won 1st prize for the Faculty Outstanding Graduate Poster Award; Poster presented at the 2019-20 competition at the Faculty of Education in Science and Technology, Technion. Kaplan Award (2020) for deep commitment to the education system (1,200$).

4. Tomer Peleg. Who moved my triangle? Exploring the effect of practice in a mathematics laboratory on pre- and in-service teachers' technological pedagogical-content-knowledge level (with co-advisor: Prof. Ron Aharoni). Graduated February 2021.

5. Orit Cohen-Nissan. Effective PD program that prepares mathematics coordinators to lead school-based teaching teams PD before and during the COVID-19 period. Graduated January 2022, Cum Laude.

6. Yasmin Gharra-Badran. Mathematical modeling: Classroom integration challenges, from materials design to assessment and training. Graduated October 2022, Cum Laude.

7. Liat Cohen. Exploring best-instructional practices within mathematical modelling instruction. Graduated April 2023.

8. Hadas Handelman. Scaling up mathematical modelling instruction: investigating the impact of an effective professional development program for leading teachers. Graduated July 2023, Cum Laude.

PhD theses in progress

9. Halima Sharkia. Thinking like a mathematician: Investigating mathematical habits of mind in a flipped classroom environment. Candidacy exam: February, 2022.

10. Liron Schwartz-Aviad. From learning to teaching: promoting teachers' mathematical modeling competencies in a professional development program. Candidacy exam: May, 2022.

11. Orit Cohen-Nissan. Exploring secondary students' competencies and motivation to engage in mathematical modelling. Awarded with Payne excellence citation for beginning PhD students (December, 2022). Candidacy exam: July, 2023.

12. Hadas Handelman. Enhancing STEM-based mathematical modelling through hands-on activities: the critical role of extra-mathematical knowledge. Expected candidacy exam: November, 2025.

14. LONG-TERM VISITORS AND POST-DOCTORAL ASSOCIATES

2025-2026	Post-doctoral Fellow: kholod Moed Abo Raya, Ph.D.	The interrelationship between teachers' instructional modelling competencies and students' modelling competencies in a STEM context
2018-2023	Post-doctoral Fellow: Ortal Nitzan-Tamar, Ph.D.	Professional growth of secondary-school mathematics teachers: Investigating best-instructional practices for mathematical modelling

15. PUBLICATIONS

Thesis

Ph.D. Developing pedagogical self-regulation at preservice teachers in a technological environment, supported by reflection in different foci, Bar-Ilan University, 2011. Advisor: Prof. Bracha Kramarski.

Refereed papers in professional journals

Published papers

1. **Kohen, Z.** & Kramarski, B. (2012). Developing a TPCK-SRL assessment scheme for conceptually advancing technology in education. *Studies in Educational Evaluation, 38,* 1–8. https://doi.org/10.1016/j.stueduc.2012.03.001.

2. **Kohen, Z.** & Kramarski, B. (2012). Developing self-regulation by using reflective support in a video-digital microteaching environment. *Education Research International*, 2012, 10 pages, https://doi.org/10.1155/2012/105246.
3. Kramarski, B. & **Kohen, Z.** (2017). Promoting preservice teachers' dual self-regulation roles as learners and as teachers: Effects of generic vs. specific prompts. *Metacognition and Learning*, 12, 157–191. https://doi.org/10.1007/s11409-016-9164-8.

Since my appointment at the Technion

4. Dori, Y. J., Avargil, S., **Kohen, Z.**, & Saar, L. (2018). Context-based learning and metacognitive prompts for enhancing scientific text comprehension. *International Journal of Science Education* special issue on context-based learning: cognition, metacognition and affective Aspects – ten years later, 40(10), 1198-1220. https://doi.org/10.1080/09500693.2018.1470351.
5. **Kohen, Z.** (2019). Informed integration of IWB technology, incorporated with exposure to varied mathematics problem-solving skills: Its effect on students' real-time emotions. *International Journal of Mathematical Education in Science and Technology, 50*(8), 1128-1151. https://doi.org/10.1080/0020739X.2018.1562119.
6. **Kohen, Z.** & Dori, Y. J. (2019). Toward narrowing the gap between science communication and science education disciplines. *Review of Education, 7*(3), 525-566. https://doi.org/10.1002/rev3.3136.
7. **Kohen, Z.**, Herscovitz, O., & Dori, Y.J. (2020). How to promote chemical literacy? on-line question posing and communicating with scientists. *Chemistry Education Research and Practice, 21*(1), 250 – 266. https://doi.org/10.1039/C9RP00134D.
8. Avargil, S., **Kohen, Z.**, & Dori, Y. J. (2020). Trends and perceptions of choosing chemistry as a major and a career. *Chemistry Education Research and Practice, 21*, 668 – 684. https://doi.org/10.1039/C9RP00158A.
9. Dori, Y. J., **Kohen, Z.**, & Rizowy, B. (2020). Mathematics for computer science: a flipped classroom with an optional project. *Eurasia Journal of Mathematics, Science and Technology Education, 16*(12), em1915. https://doi.org/10.29333/ejmste/9149.

Since my promotion to Assistant Professor (underline: students/postdocs):

10. **Kohen, Z.** & Orenstein, D. (2021)[4]. Mathematical modeling of tech-related real-world problems for secondary school-level mathematics. *Educational Studies in Mathematics, 107*(1), 71-91. https://doi.org/10.1007/s10649-020-10020-1.
11. Sharkia, H., & **Kohen, Z.** (2021). Flipped classroom among minorities in the context of mathematics learning: The Israeli case. *Mathematics*, special issue on Mathematics Education in Science, Technology and Engineering: Exploring Research and Scholarship of the Student and Staff Experience, *9*(13), 1500. https://doi:10.3390/math9131500.
12. **Kohen, Z.**, Amram, M., & Dagan, M., & Miranda, T. (2022; published online, October 31, 2019). Self-efficacy and problem-solving skills in mathematics: The effect of instruction-based dynamic versus static visualization. *Interactive Learning Environments, 30*(4), 759-778. https://doi.org/10.1080/10494820.2019.1683588.

[4] Awarded one of the top performing articles in terms of download requests in 2022.

13. **Kohen, Z.**, & Borko, H. (2022; published online, December 20, 2019). Classroom discourse in mathematics lessons: The effects of a practice-based professional development program. *Professional Development in Education, 48*(4), 576-593. https://doi.org/10.1080/19415257.2019.1706186
14. **Kohen, Z.** & Nitzan, O. (2022). Excellence in mathematics in secondary school and choosing and excelling in STEM professions over significant periods in life. *International Journal of Science and Mathematics Education, 20*(1), 169-191. https://doi.org/10.1007/s10763-020-10138-x.
15. **Kohen, Z.** & Nitzan, O. (2022). Contextual mathematical modelling: Problem-solving characterization and feasibility. *Education Sciences*, special issue on STEAM Education and Problem Solving, 12(7), 454. https://doi.org/10.3390/educsci12070454.
16. Nitzan-Tamar, O. & **Kohen, Z.** (2022). Secondary school mathematics and entrance into the STEM professions: A longitudinal study. *International Journal of STEM Education*, 9, 63. https://doi.org/10.1186/s40594-022-00381-9.
17. **Kohen, Z.** & Gharra-Badran, Y. (2023). A rubric for assessing mathematical modelling problems in a scientific-engineering context. *Teaching Mathematics and its Applications*: *An International Journal of the IMA, 42*(3), 266–288. https://doi.org/10.1093/teamat/hrac018
18. Cohen-Nissan, O., & **Kohen, Z.** (2023). Mathematics coordinators as school team PD leaders before and during COVID-19. *Teaching and Teacher Education*, 121, 103921, https://doi.org/10.1016/j.tate.2022.103921.
19. Cohen-Nissan, O., & **Kohen, Z.** (2023). Secondary school students' competencies and motivation to engage in mathematical modelling tasks in a virtual learning environment. *Frontiers in Education, 8, special issue: Mathematical Modelling Through and with Digital Resources*. https://doi.org/10.3389/feduc.2023.1140364
20. Siller, HS., Nitzan-Tamar, O. & Kohen, Z. (2023). Scaffolding practices for modelling instruction in STEM-related contexts: Insights from expert and novice teachers. *ZDM Mathematics Education, 55*, 1351–1364. https://doi.org/10.1007/s11858-023-01529-9

Since my promotion to Associate Professor (underline: students/postdocs):

21. **Kohen, Z.**, Schwartz-Aviad, L., & Peleg, T. (2025; published online, May 4, 2023). Who moved my triangle? Pre- and in-service teachers inquiring in a mathematics lab. *International Journal of Mathematical Education in Science and Technology*, *56*(1), 130-158. https://doi.org/10.1080/0020739X.2023.2199314
22. **Kohen, Z**. (2025). Structured mathematical modelling in an authentic scientific-engineering context. ZDM Mathematics Education (6), *special issue (Eds.: Schukajlow, S., Krawitz, J., Yang, X., & Geiger, V.: International Perspectives on Mathematical Modelling*. https://doi.org/10.1007/s11858-025-01654-7
23. Sharkia, H. & **Kohen, Z.** (2025). "Simply Math" – a hybrid MOOC supporting advanced mathematics learning in Israeli secondary schools. *Education Sciences,* special issue on Advances in Online and Distance Learning. https://doi.org/10.3390/educsci15030271

In Hebrew

24. **Kohen, Z.** & Cohen-Nissan, O. (2022). A community of math coordinators to promote the leading of a professional development process in the math school team. *Journal for Mathematics Education Research and Study* [Hebrew; In VATAT list; ISSN 2311-5483].

Submitted

25. Schwartz-Aviad, L. & **Kohen, Z.** A glimpse into the diagnostic competence of teachers in modelling instruction.
26. Handelman H. & **Kohen, Z**. Unlocking the potential: Exploring the scalability of a professional development program for leading teachers for mathematical modelling instruction.
27. **Kohen, Z.**, Keller, N., & Koichu, B. The interplay between metacognitive and self-assessment skills of mathematics teachers as learners in online problem-solving forums. Technology, Knowledge, and Learning, *special issue (Eds. Werlen, E., & Laubscher D.): Metacognition and self-directed learning: Skills for self-assessment in technology-based learning*.

Chapters in books

Kohen, Z. & Kramarski, B. (2018). Promoting mathematics teachers' metacognition. In Y. J. Dori, Z. Mevarech, and D. Baker (Eds.), *Cognition, Metacognition and Culture in STEM Education* (pp. 279-306). Dordrecht, The Netherlands: Springer-Verlag.

Refereed papers in conference proceedings underline: presenter

Nitzan, O., Orenstein, D., & **Kohen, Z.** (2019). Authentic Hi-Tech problems in secondary school mathematics. In Graven, M., Venkat, H., Essien, A. & Vale, P. (Eds). (2019). *Proceedings of the 43rd Conference of the International Group for the Psychology of Mathematics Education* (Vol 3). pp. 137-144. Pretoria, South Africa: PME.

Kohen, Z., Keller, N., & Koichu, B. (2020). Metacognitive processes in online collaborative problem solving forums: Mathematics teachers' dual roles. In Borko, H. & Potari, D. (Eds.), *Proceedings of the International Commission on Mathematical Instruction (ICMI 25).* Lisbon, Portugal: University of Lisbon.

Kohen, Z., & Nitzan, O. (2021). Excellence in mathematics in high school and the choice of STEM professions over significant periods of life. In Inprasitha, M., Changsri, N. & Boonsena, N. (Eds). (2021). *Proceedings of the 44th Conference of the International Group for the Psychology of Mathematics Education, Vol. 3, pp. 112-117*.

Schwartz-Aviad, L., Peleg, T., & **Kohen, Z.** (2021). TPCK training for pre- and in-service mathematics teachers in the prolong process from learners to teachers. In Inprasitha, M., Changsri, N. & Boonsena, N. (Eds). (2021). *Proceedings of the 44th Conference of the International Group for the Psychology of Mathematics Education, Vol. 1, pp. 122*.

Keller, N., & **Kohen, Z.** (2022). Teachers' development of self-regulation and problem-solving skills in online forums as learners and mentors. In *Twelve Congress of the European Society for Research in Mathematics Education (CERME12).*

Sharkia, H., & **Kohen, Z.** (2022). Implementing the 5E inquiry model in an online platform of a flipped classroom environment. In *Twelve Congress of the European Society for Research in Mathematics Education (CERME12).*

Nitzan, O., & **Kohen, Z.** (2022). The effect of secondary mathematics on future choice in STEM professions. In C. Fernández, S. Llinares, A. Gutiérrez, & N. Planas (Eds.), *Proceedings of the 45th Conference of the International Group for the Psychology of Mathematics Education* (Vol. 3, p. 243-250). PME.

Handelman, H. & **Kohen, Z.** (2022). A designated professional development program for promoting mathematical modelling competency among leading teachers. In C. Fernández, S. Llinares, A. Gutiérrez, & N. Planas (Eds.), *Proceedings of the 45th Conference of the International Group for the Psychology of Mathematics Education* (Vol. 2, p. 339-346). PME.

Keller, N. & **Kohen, Z.** (2022). Using online discussion forums for the professional development of mathematics teachers. In C. Fernández, S. Llinares, A. Gutiérrez, & N. Planas (Eds.), *Proceedings of the 45th Conference of the International Group for the Psychology of Mathematics Education* (Vol. 3, p. 19-26). PME.

Kohen, Z., Nitzan, O., & Cohen-Nissan, O. (2022). An online camp during COVID-19 for promoting students' mathematical modelling and motivation. 2022. In C. Fernández, S. Llinares, A. Gutiérrez, & N. Planas (Eds.), *Proceedings of the 45th Conference of the International Group for the Psychology of Mathematics Education* (Vol. 4, p. 248). PME.

Schwartz-Aviad, L., & **Kohen, Z.** (2022). Teachers identify students' challenges while engaging in mathematical modeling tasks. 2022. In C. Fernández, S. Llinares, A. Gutiérrez, & N. Planas (Eds.), *Proceedings of the 45th Conference of the International Group for the Psychology of Mathematics Education* (Vol. 4, p. 287). PME.

Sharkia, H., & **Kohen, Z.** (2022). Investigating mathematical habits of mind in a flipped classroom environment. In C. Fernández, S. Llinares, A. Gutiérrez, & N. Planas (Eds.), *Proceedings of the 45th Conference of the International Group for the Psychology of Mathematics Education* (Vol. 4, p. 291). PME.

Cohen-Nissan, O., & **Kohen, Z.** (2022). Leveraging the role of mathematics teaching coordinators to lead effective PD for teachers. In C. Fernández, S. Llinares, A. Gutiérrez, & N. Planas (Eds.). *Proceedings of the 45th Conference of the International Group for the Psychology of Mathematics Education* (Vol. 4, pp. 192). PME.

Cohen-Nissan, O., & **Kohen, Z.** (2023). Mathematical modeling competences of secondary school students in a virtual learning environment. In M. Ayalon, B. Koichu, R. Leikin, L. Rubel., & M. Tabach (Eds.). (2023). *Proceedings of the 46th Conference of the International Group for the Psychology of Mathematics Education* (Vol. 1, pp. 239). PME.

Handelman, H., & **Kohen, Z.** (2023). Promoting mathematical modelling competencies among leading teachers. In M. Ayalon, B. Koichu, R. Leikin, L. Rubel., & M. Tabach (Eds.). (2023). *Proceedings of the 46th Conference of the International Group for the Psychology of Mathematics Education* (Vol. 1, pp. 253). PME.

Nitzan-Tamar, O., & **Kohen, Z.** (2023). Mathematical modelling instruction by pre-service teachers. In M. Ayalon, B. Koichu, R. Leikin, L. Rubel., & M. Tabach (Eds.). (2023). *Proceedings of the 46th Conference of the International Group for the Psychology of Mathematics Education* (Vol. 1, pp. 300). PME.

Schwartz-Aviad, L., & **Kohen, Z.** (2023). Assessing the diagnostic competence of in-service teachers during modelling instruction. In M. Ayalon, B. Koichu, R. Leikin, L. Rubel., & M. Tabach (Eds.). (2023). *Proceedings of the 46th Conference of the International Group for the Psychology of Mathematics Education* (Vol. 1, pp. 322). PME.

Sharkia, H., & **Kohen, Z.** (2023). Studying advanced mathematics through a hybrid mooc – a case study. In M. Ayalon, B. Koichu, R. Leikin, L. Rubel., & M. Tabach (Eds.). (2023). *Proceedings of the 46th Conference of the International Group for the Psychology of Mathematics Education* (Vol. 1, pp. 395). PME.

Schwartz-Aviad, L., & **Kohen, Z.** (2025). In-service teachers' scaffolding practices based on diagnosing modelling challenges during instruction. In fourteen Congress of the European Society for Research in Mathematics Education (CERME14).

Research reports (in Hebrew with Extended Abstract in English)

Dori, Y. J. & **Kohen, Z.** (2013). Research review on heterogeneity: State of the art in educational models and best practices for coping with systemic or local student heterogeneity. The Israel Academy of Sciences and Humanities – The Initiative

for Applicative Research in Education. Refereed publication by the committee of *An Education System for All and for Each and Every One*, 48 pages. http://education.academy.ac.il/SystemFiles/23058.pdf

Dori, Y. J. & **Kohen, Z.**, & Hershkovitz, O. (2015). Holistic assessment of science communication based on the positions of different stakeholders: Scientists, teachers, undergraduates, high school students, and the public. The Samuel Neaman Institute, Technion, Haifa, Israel, 50 pages. https://www.neaman.org.il/Holistic-Assessment-Science-Communication-Based-Positions-Different-Stakeholders-HEB

Kohen, Z., Nitzan, O., & Gafni, N. (2019). Trends in education and professional career in science and technology: From choice of major in high school to career choice. National Institute for Testing and Evaluation (NITE), 89 pages. https://www.nite.org.il/wp-content/uploads/2020/07/RR-19-03.pdf

Kohen, Z. & Gharra-Badran, Y. (in press). Mathematical modelling of Blockchain technology and its adaptation for the high school curriculum. Hogeg Blockchain Research institute, Tel-Aviv University, Israel, 55 pages.

17. CONFERENCES

Contributed Talks underline: presenter

International Conferences

1. Kohen, Z. & Kramarski, B. (2008, July). Effects of different reflective supports in microteaching environments on pedagogical self regulation of preservice teachers. Paper presented at the 11th annual Conference, JURE, Leuven, Belgium.
2. Kohen, Z. & Kramarski, B. (2009, August). Developing pedagogical self regulation by using reflective support in a video-digital microteaching environment. Paper presented at the 12th annual Conference, JURE, Amsterdam, The Netherlands (won outstanding paper).
3. Kohen, Z. & Kramarski, B. (2010, May). Assessing preservice teachers' SRL by using reflective support in a microteaching environment. Paper presented at the 4th Biennial Conference, Sig 16: Metacognition, Muenster, Germany.
4. Kohen, Z. & Kramarski, B. (2011, August-September). Using reflective support with different focus points for developing pedagogical self-regulation. Paper presented at the 14th Biennial Conference, EARLI, Exeter, United Kingdom.
5. Kohen, Z. & Kramarski, B. (2012, September). Developing SRL in TPCK context (TPCK-SRL) in a video-digital microteaching program. Paper presented at the 5th Biennial Conference, Sig 16: Metacognition, Milano, Italy.
6. Kohen, Z. & Kramarski, B. (2013, August). Using videotaped practice to promote SRL among pre-service teachers in their learner/ teacher roles. Paper presented at the 15th Biennial Conference, EARLI, Munich, Germany.
7. Kohen, Z. & Kramarski, B. (2013, July). Teacher- vs. learner-centered support for SRL in a technological environment. Paper presented at the 6th International Conference on Teacher Education- Changing Reality through Education, Jerusalem, Israel.
8. Kohen, Z., Saar, L., & Dori, Y.J. (2014, March-April). Two perspectives of reading adapted scientific articles: Cognitive and practical versus metacognitive. Paper presented at the NARST Annual International Conference, Pittsburgh, Pennsylvania.
9. Kohen, Z. & Kramarski, B. (2015, April). Promoting the dual roles of teachers as self-regulated learners and self-regulated teachers. Paper presented at the AERA 2015 Annual Meeting, Chicago, IL, USA.

10. Kohen, Z., Perlman, D., & Dori, Y. J. (2015, April). The effect of engaging science programs on undergraduates' educational experiences. Paper presented at the NARST Annual International Conference, Chicago, IL, USA.
11. Dori, Y.J, Kohen, Z., & Meyer, A. (2015, April). Flipped classroom for computer science undergraduates: The effect of in-class team problem solving and projects. Paper presented at the NARST Annual International Conference, Chicago, IL, USA.
12. Dori, Y.J, Kohen, Z., & Meyer, A. (2016, April). Team learning in a computer science flipped classroom: Undergraduates' problem solving, conceptual, and declared knowledge. Paper presented at the NARST Annual International Conference, Baltimore, MD, USA.
13. Kohen, Z., & Miranda, T. (2016, July). Self-efficacy in learning mathematics: The effect of learning based visualization and its mutual relation to students' achievements. Paper presented at the International Congress on Mathematical Education (ICME), Hamburg, Germany.
14. Kohen, Z., & Dori, Y.J (2017, April). Stakeholders' views on science communication, focusing on channel types. Paper presented at the NARST Annual International Conference, San Antonio, TX, USA.

Since my appointment at the Technion:

15. Kohen, Z., Shav-Artza, O., Nitzan, O., & Dori, Y.J, (2018, March). Chemists' and Chemical Engineers' Perceptions of Chemistry-Related Careers in Industry. Paper presented at the NARST Annual International Conference, Atlanta, GA, USA.
16. Avargil S., Kohen Z., Shwarts, D., Shwartz, G., Shav-Artza, O., Strimbaum G., Vincent-Ruz, P., Sevian, H., Schunn, C.D., & Dori, Y.J. (2019, April). Choosing a science career: Self-efficacy and identity perspectives. Symposium presented at the NARST Annual International Conference, Baltimore, MD, USA.
17. Orenstein, D. & Kohen, Z. (June, 2019). Using Hi-Tech-related authentic problems in secondary school math teaching. Paper presented at the 7th International Conference on Teacher Education: The Story of Innovation in Teacher Education, MOFET institute, Tel-Aviv, Israel.
18. Nitzan, O., Orenstein, D., & Kohen, Z. (June, 2019). Authentic Hi-Tech problems in secondary school mathematics. Paper presented at the 7th International Conference on Teacher Education: The Story of Innovation in Teacher Education, MOFET institute, Tel-Aviv, Israel.
19. Avargil, S., Kohen, Z., Dori, Y. J. (2020). Chemistry as a Major and Career Choice: Trends vs. Personal and Environmental Themes. Oral presentation at the15th European Conference on Research in Chemical Education (ECRICE), Rehovot, Israel (Canceled due to Covid-19).

Since my promotion to Assistant Professor:

20. Kohen, Z. & Cohen-Nissan, O. (April, 2021). STEM Teachers' Professional Learning Community During the COVID-19 Pandemic. Paper presented at the virtual NARST Annual International Conference.
21. Nitzan, O. & kohen, Z. (July, 2022). Secondary mathematics and future choice in STEM professions. Paper presented at the Online International Conference Wonders of Stem and Steam Education: What, Why and How?
22. Schwartz-Aviad, L. & Kohen, Z. (July, 2022). Mapping Students' Challenges While Engaging in Mathematical Modeling Tasks. Paper presented at the Online International Conference Wonders of Stem and Steam Education: What, Why and How?

Since my promotion to Associate Professor:

23. Cohen-Nissan, O. & **Kohen, Z.** (2025). From Structured to Directed-Iterative Modelling: Scaffolding through Task Design to Foster Mathematical Modelling Competencies. Long presentation, to be presented at the ICTMA 22 conference, Linköping, Switzerland.
24. Nitzan-Tamar, O., **Kohen, Z.**, & Siller, HS. (2025). Adapting Mathematical Modelling Tasks to a Variety of Levels for Teaching in a Heterogeneous Classroom. Long presentation, to be presented at the ICTMA 22 conference, Linköping, Switzerland.
25. Handelman, H. & **Kohen, Z.** (2025). The Critical Role of Extra-Mathematical Knowledge in STEM-based hands-on mathematical modelling activities. Short presentation, to be presented at the ICTMA 22 conference, Linköping, Switzerland.

National Conferences (selected)

1. Kohen, Z. & Kramarski, B. (2009). Developing pedagogical self-regulation by using reflective support in a video-digital learning, Teaching-Learning-Research Conference, the Open University of Israel.
2. Kohen, Z. & Kramarski, B. (2010). Investigating self-regulated learning in mathematical teaching, the 9th Seminar in Teaching Mathematics, Science and Technology, Nir Etzion.
3. Kohen, Z. & Kramarski, B. (2010). Developing self-regulation among pre-service teachers, by using reflective support in a technological environment, Chais Annual Conference on Instructional Technologies Research, the Open University of Israel.
4. Kohen, Z. & Kramarski, B. (2010). Various reflective focal points of support for developing self-regulation among pre-service teachers in a web-based learning environment, The 8th Annual MEITAL National Conference, the Open University of Israel.
5. Kohen, Z. & Kramarski, B. (2012). Investigating two intervention programs among pre-service teachers: Self-regulation vs. co-regulation, Conference in Research Education, Levinsky College of Education.
6. Kohen, Z. & Dori, Y. J. (2013). Optimal educational models for coping with student diversity in science and technology domains, the 10th Seminar in Teaching Mathematics, Science and Technology, Haifa.
7. Kohen, Z. & Kramarski, B. (2014). Developing self-regulated learning (SRL) among pre-service teachers, as learners and as teachers, using reflective support. Conference in Research Education, Levinsky College of Education.
8. Kohen, Z., Amram, M., & Dagan, M., & Miranda, T. (2014). Examining the integration of dynamic visual representations in constructing mathematical knowledge and the effect on emotional aspects among middle school and higher education mathematical students, The 12th Annual MEITAL National Conference: New Technologies and Their Evaluation in Online Teaching and Learning, Levinsky College of Education.
9. Kohen, Z., Dori, Y.J, & Herscovitz, O. (2015). A Holistic view of science communication by various stakeholders' views: Scientists, STEM students, teachers, and the educated public, the 6th Conference of Science Communication in Israel, Weizmann Institute of Science.
10. Kohen, Z., Dori, Y.J, & Herscovitz, O. (2016). Holistic assessment of science communication based on the positions of different Stakeholders: Scientists, teachers, undergraduates, high school students, and the public, symposium of research based co-operation in STEM education: The case of the education

system in Israel, Faculty of Education in Science and Technology, Technion, Israel Institute of Technology.

11. Kohen, Z., Rizowy, B., Dori, Y.J., & Meyer, A. (2017). Affective Aspects of a Flipped Classroom: Mathematics for Computer Science Undergraduate Students at MIT, The 15th Annual MEITAL National Conference, Haifa University.

Since my appointment at the Technion (selected):

12. Schwartz-Asher, D., Kohen, Z., Avargil, S., & Dori, Y.J. (2018). The processes of choosing a scientific academic career – science education and gender aspects. The Conference on The Future of Gender Equity – Designing Tomorrow, Organized by the Ministry of Science, Technology, and Space, Tel-Aviv, Israel.
13. Kohen, Z. (2019). Trends in education and professional career in science and technology: From choice of major in high school to career choice. The annual OECD educational conference – a glance on education in Israel. Central Bureau of Statistics, Jerusalem.
14. Kohen, Z., Keller, N., Peleg, T., & Nitzan, O. (2020). Challenging problems for motivating students' mathematics learning: The integration of innovative pedagogies in secondary school. Discussion group presented at the 8th Jerusalem Conference on Research in Mathematics Education (JCRME), Jerusalem.

Since my promotion to Senior Lecturer/Assistant Professor (selected):

15. Kohen, Z., Cohen-Nissan, O., Peleg, T., Schwartz-Aviad, L., Nitzan, O., & Sharkia, H. (2021). Distance learning in the COVID-19 era: From teachers' professional development to assimilation in classrooms. Symposium presented at the 9th Jerusalem Conference on Research in Mathematics Education (JCRME), Online conference.
16. Nitzan, O., Handelman, H., & Kohen, Z. (2022). Integration of mathematical tasks with an engineering-technological context: Mathematical excellence and continued STEM professions' choice. Symposium presented at the 10th Jerusalem Conference on Research in Mathematics Education (JCRME), Online conference.
17. Kohen, Z., Gharra-Badran, Y., Sharkia, H., & Keller, N. (2022). Assessment of mathematics education to promote 21st century learners. Discussion group presented at the 10th Jerusalem Conference on Research in Mathematics Education (JCRME), Online conference.
18. Handelman, H., & Kohen, Z. (2023). A professional development program for leading teachers focused on mathematical modeling in an engineering context. Research report presented at the 11th Jerusalem Conference on Research in Mathematics Education (JCRME), Online conference.
19. Kohen, Z., Handelman, H., Schwartz-Aviad, L., & Cohen-Nissan, O. (2024). Mathematical modelling in a scientific-engineering context: A large-scale implementation model. Symposium presented at the 12th Jerusalem Conference on Research in Mathematics Education (JCRME), Online conference.

Since my promotion to Associate Professor (underline: students/postdocs):

20. Cohen-Nissan, O. & Kohen, Z. (2025). Investigating the application of mathematical modelling competencies in solving scientific, engineering, and technological context-based problems among middle school students. Research report presented at the 13th Jerusalem Conference on Research in Mathematics Education (JCRME), Jerusalem.

21. Nitzan-Tamar, O. & Kohen, Z. (2025). Adapting mathematical modelling tasks to different levels: conceptualization, design, and assessment of modelling tasks. Research report presented at the 13th Jerusalem Conference on Research in Mathematics Education (JCRME), Jerusalem.
22. Schwartz-Aviad, L. & Kohen, Z. (2025). Instructional practices based on identifying student challenges during mathematical modelling instruction. Research report presented at the 13th Jerusalem Conference on Research in Mathematics Education (JCRME), Jerusalem.
23. Sharkia, H. & Kohen, Z. (2025). "Simply Math" - A Hybrid MOOC as a supportive environment for advanced mathematics learning in high school during the COVID-19. Poster presented at the 13th Jerusalem Conference on Research in Mathematics Education (JCRME), Jerusalem.

Participation in organizing conferences

2019 Co-chairperson of the of the Organizing Committee, ***5th Conference of the Learning Sciences***, Technion, Haifa, IIT, Israel.
2021 Chairperson of the Virtual Organizing Committee (VOC), ***44th international Psychology of Mathematics Education*** (PME 44) conference.
2022 Chairperson of the ***Mathematical Modelling Conference: Putting Reality into Practice***, Technion, Haifa, IIT, Israel.
2024-2025 A member of the Organizing Committee**, Jerusalem Conference on Research in Mathematics Education (JCRME)**, Jerusalem, Israel.
2025-2026 Chair of the Organizing Committee**, Jerusalem Conference on Research in Mathematics Education (JCRME)**, Jerusalem, Israel.