Curriculum Vitae – Ruti Segal

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1. Personal Details

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2. Higher Education

A. Undergraduate and Graduate Studies

Period of Study	Name of Institution and Department	Degree	Year of Approval of Degree
2008-2013	Technion - Israel Institute of Technology, Haifa, Israel. The Faculty of Science and Technology Education	Ph.D. Mathematics Education	2013
1998-2001	Hebrew University, Jerusalem, Israel. The Science Teaching Program	M.Sc. Mathematics Education	2001
1985-1988	Haifa University, Haifa, Israel. Department of Mathematics and Computer Science	B.Sc. Mathematics and Computer Science.	1988

B. Post-Doctoral Studies

Period of Study	Name of Institution, Department and Host	Degree	Year of Completion
2017-2019	Technion - Israel Institute of Technology, Haifa, Israel. The Faculty of Science and Technology Education	Post-Doctoral fellow	2019
2014-2016	Samuel Neamann Institute for National Policy Studies, Haifa, Israel. Prof. Nitsa Movshovitz-Hadar and Prof. Atara Shriki	Post-Doctoral fellow	2016

3. Academic Ranks and Tenure in Institutes of Higher Education

Dates	Name of Institution and Department	Rank/Position
1.9.2017	Oranim – an Academic College of Education, Kyrat Tivon	Senior Lecturer permanent employed (100%)

4. Offices in Academic Administration

2019-present Head of the Department B.Ed. in Mathematics Education of Primary School Education at Oranim- Academic College of Education, Tivon, Israel.

2019-present Department Chair M.Ed. in Mathematics and Science of Primary School Education at Oranim Academic College of Education, Tivon, Israel.

2017–2019 Academic advisor to the "Vidaktika" project – a framework for the professional development of mathematics teachers at the level of 5 units, following self-video, Department of Science Education, Weizmann Institute of Science, Rehovot, Israel.

5. Scholarly Positions and Activities outside the Institution

Reviewer Experience

2021-present: Reviewer of EJMSTE Eurasia Journal of Mathematics, Science and Technology Education.
2020- present: Reviewer, Journal of Cognitive Education and Psychology.
2018– present: Reviewer, International Journal of Science and Mathematics Education.
2017– present: Reviewer, Jerusalem Conference on Research in Mathematics Education.
2015- present: Reviewer, International Journal of Mathematical Education in Science and Technology.
2014- present: Reviewer, The Israel Journal of Research in Mathematics Education, Israel (Published in Hebrew).
2023 Reviewer, an annual conference on "connecting action and research in education" Ben Gurion University, Israel.
2021 – member in American Educational Research Association

6. Participation in Scholarly Conferences

a. Active Participation

Presentations at an international conference

Date	Name of Conference	Place of Conference	The subject of the Lecture/Discussion	Role
July 2023 (*)	*the 46th Conference of the International Group for the Psychology of Mathematics Education (PME)*	*Haifa University, Israel*	Whatsapp group + Bagrut = Bagroup: Teachers' Perspectives (Presented as a *Poster presentation*)	Presenting
July 2023 (*)	*the 46th Conference of the International Group for the Psychology of Mathematics Education (PME)*	*Haifa University, Israel*	Communicating 21st-century competencies while bridging between contemporary and school mathematics (Presented as a *Oral Communication*)	Co-author
July 2023 (*)	*the 46th Conference of the International Group for the Psychology of Mathematics*	*Haifa University, Israel*	longitudinal impact of mathematics news snapshots on high-school students' perceptions of mathematics (Presented as a *Poster presentation*)	Co-author

	Education (PME)			
July 2023 (*)	*The Thirteen Congress of the European Society for Research in Mathematics Education (CERME13) TWG15*	*Bodaphesht, Hungary*	Teachers' attitudes towards technology during emergency remote learning	Presenting
July 2023 (*)	*The Thirteen Congress of the European Society for Research in Mathematics Education (CERME13) TWG15*	*Bodaphesht, Hungary*	Science and mathematics teachers' attitudes and emotions regarding technology integration	Presenting
July 2023 (*)	*The Thirteen Congress of the European Society for Research in Mathematics Education (CERME13) TWG15*	*Bodaphesht, Hungary*	Reaction for four presentations – session 3	Presenting
June 2023 (*)	*Passion and Professionalism in Teacher Education*	*The MOFET Institute, Tel Aviv*	Passion and professionalism informed by teachers' perspectives on technologically-supported environments	Full session chair
June 2023 (*)	*Passion and Professionalism in Teacher Education*	*The MOFET Institute, Tel Aviv*	Pedagogical content awareness: a possible framework to study teachers mentoring	Co-author
June 2023 (*)	*Passion and Professionalism in Teacher Education*	*The MOFET Institute, Tel Aviv*	Using evidence-based Curiosity-Driven Discourse for enhancing mathematics teacher's instructor's professional awareness	Presenting
June 2023 (*)	*Passion and Professionalism in Teacher Education*	*The MOFET Institute, Tel Aviv*	Teachers' Attitudes and Emotions Regarding the Integration of Technology into Teaching	Presenting.

June 2023 (*)	*Passion and Professionalism in Teacher Education*	*The MOFET Institute, Tel Aviv*	Teachers' Attitudes About the Computerized Technology Tools They Incorporate in their Teaching	Co-author
May 2023 (*)	*The 14th International Conference on Education: Navigating Future Strategies for Advancing Education and Interdisciplinary Perspectives*	*Tafila Technical University, Jordan*	Primary-school mathematics teacher's professional growth as a result of architecture changes incurred when transferring mathematical tasks from the textbook to a dynamic environment	Presenting
Sep 2022 (*)	*CADGME – Conference on Digital Tools in Mathematics Education*	Lev Institute, Jerusalem, Israel	Digital tools before and since the outbreak of the COVID-19 pandemic: mathematics and science teachers' priorities	co-author as leader of the research group
July 2022 (*)	*The 6th International conference on advanced research in education teaching and learning*	University College of Dublin (UCD) Dublin, Ireland	Personalization of mathematics teaching based on student's mathematical-communication-forms – Oral presentation https://www.dpublication.com/wp-content/uploads/2022/07/17-7166.pdf	Presenting
July 2022 (*)	*The 45nd Conference of the International Group for the Psychology of Mathematics Education*: *PME*	Alicante, Spain	Personalization of mathematics teaching based on student's mathematical communication forms – Poster presentation	Presenting
July 2022 (*)	The wonder of STEM and STEAM education: What, Why, and How?	Online – Mofet institude	Implementing STEAM Education: Towards a Scalable Pedagogical Paradigm - Link	Leader of Research & Development Group
Feb. 2022 (*)	ATEE (Association for Teacher Education in Europe *ICT in education & training in times of pandemic*	Online (Universidad de Granada, Spain)	Mathematics and science teachers' attitudes towards using technology for learning before and during the pandemic.	co-author as leader of a research group

Feb. 2022 (*)	*The Twelve Congress of the European Society for Research in Mathematics Education (CERME12) TWG-15*	Online - Following the spread of the coronavirus	Teachers' perceptions of teaching and learning mathematics in the WhatsApp environment through the "Bagroup" project	Presenting
Feb. 2022 (*)	*The Twelve Congress of the European Society for Research in Mathematics Education (CERME13) TWG15CERME-12 TWG-8*	Online - Following the spread of the coronavirus	Students' perceptions of learning mathematics in the WhatsApp environment through the *Bagroup* project	Participating as co-author
July 2021 (*)	*Icme-14: The 14th The International Congress on Mathematical Education*, Shanghai	Online - Following the spread of the coronavirus	A multi-stage attempt at narrowing the gap between contemporary mathematics and High school mathematics. (Presented as a *Research Report*)	Participating as co-author
July 2021 (*)	*Icme-14: The 14th The International Congress on Mathematical Education*, Shanghai	Online - Following the spread of the coronavirus	Interweaving Mathematics-News-Snapshots in class: Implications for teachers Horizon Content Knowledge. (Presented as a *Research Report*)	Presenting
Apr. 2021 (*)	*AREA- American Educational Research Association Virtual Annual Meeting*, *Accepting Educational Responsibility*	Online - Following the spread of the coronavirus	Heightening Teachers' Professional Awareness in Video-Based Peer Discourse to Develop Specialized Content Knowledge. (Presented at *Symposium* on New Perspectives on Teacher Learning: Teachers as Facilitators of their Peers')	Presenting
Apr. 2021 (*)	*AREA- American Educational Research Association Virtual Annual Meeting, Accepting Educational Responsibility*	Online - Following the spread of the coronavirus	Curiosity-Driven Discourse as an Opportunity for Mentors' Professional Growth as Teachers. (Presented at *Symposium* on New Perspectives on Teacher Learning: Teachers as Facilitators of their Peers')	Participating as co-author
Apr. 2021 (*)	*AREA- American Educational Research Association Virtual Annual Meeting*, *Accepting Educational Responsibility*	Online - Following the spread of the coronavirus	Introducing Pedagogical Content Awareness to Model Growth in the Context of Teacher Peer. (Presented at *Symposium* on New Perspectives on Teacher Learning: Teachers as Facilitators of their Peers')	Participating as co-author
Feb. 2020 (*)	*ICMI 25* conference-proceedings **:***Teachers of Mathematics Working and Learning in Collaborative Groups. Theme D .The International*	Lisbon, Portugal	Ramzor – A Digital Environment that Constitutes Opportunities for Mathematics Teachers Collaboration. (Presented as a *Research Report*)	Presenting

	Commission on Mathematical Instruction			
Aug. 2019 (*)	The Conference of *European Science Education Research Association (ESERA)*	Bologna, Italy	Employing Curiosity-Driven Video-Based Discourse to Facilitate Teachers as Mentors of Teachers (Presented as *Workshop Group*)	Co-author
Aug. 2019 (*)	The 15th International Conference of The Mathematics Education for the Future Project *Theory and Practice: An Interface or A Great Divide?*	Maynooth University, Kildare, Ireland	Bridging Between School Mathematics and Contemporary Mathematics: Turning a Dream into Reality	Co-author
June 2019 (*)	*The Story of Innovation in Teacher Education*	MOFET Institute, Tel-Aviv, Israel	High-school Teachers' Professional Development towards Interweaving Contemporary Disciplinary Knowledge in School: The Case of Mathematics-News-Snapshots. (Presented as a *Workshop Group*)	Co-presentation
June 2019 (*)	*The Story of Innovation in Teacher Education*	MOFET Institute, Tel-Aviv, Israel	Mathematical Discourse as a Lever for Understanding the Concepts of "Area" and "Perimeter" among Fifth Graders. (Presented as a *Poster Presentation*)	Co-author and participate as a facilitator of the graduate student
June 2019 (*)	*The Story of Innovation in Teacher Education*	MOFET Institute, Tel-Aviv, Israel	What if not?" Inquiry Method Using Technology for Developing Students' Mathematical Knowledge for Teaching (Presented as a *Research Report*)	Presenting
June 2019 (*)	*The Story of Innovation in Teacher Education*	MOFET Institute, Tel-Aviv, Israel	Teachers as mentors of teachers: A new dimension in teachers professional development. (Presented as a *Workshop Group*)	Co-presentation
June 2019 (*)	International conference *The Future of Education*	Florence, Italy	Self-video-based discourse as a lever for developing pre-service Mathematical Knowledge for Teaching	Presenting
June 2019 (*)	International conference *The Future of Education*	Florence, Italy	Educational and Experiential Activities, for Students and Teachers of Mathematics and Sciences, in a Classical Museum of Archeology	Presenting
April 2019 (*)	NCTM research conference	San Diego Convention Center, California.	Refreshing High School Curricula with Mathematics-News-Snapshots (A paper providing background for leading a *discussion session*)	Co-author
Feb 2019 (*)	CERME 11 TWG18b	Utrecht University, the Netherlands	Interweaving Mathematics News Snapshots as a facilitator for the development of mathematical knowledge for teaching. (Presented as a *Research Report*)	Presenting
Nov. 2018 (*)	*ICERI – the 11th Annual International Conference of*	Seville, Spain	Introducing High-School Students To Contemporary Mathematics Through Mathematics-News-Snapshots: Networking With	Participating as co-author

	Education, Research and Innovation		Mathematics Educators About Meeting the Challenge. (Presented as a *Research Report*)	
July 2018 (*)	*Contemporary Mathematics Education conference (CME)*	Varsha, Poland	Closing the gap between school mathematics and contemporary mathematics: introducing students to MathematicS-News-Snapshots (Presented as *Workshop*)	Co-author
July 2018 (*)	*Contemporary Mathematics Education conference (CME)*	Varsha, Poland	Pre-service teachers' knowledge about shifting between function representations (Presented as a *Research Report*)	Presenting
July 2018 (*)	*The 42nd Conference of the International Group for the Psychology of Mathematics Education*: *PME*	Umeå, Sweden	Using self-video-based conversation in training mathematics teacher instructors. (Presented as *Research Report*)	Presenting
July 2018 (*)	*The 42nd Conference of the International Group for the Psychology of Mathematics Education*: *PME*	Umeå, Sweden	Graduate students' conceptual understanding of shifting between representations. (Presented as a *Poster*)	Presenting
July 2018 (*)	*The 42nd Conference of the International Group for the Psychology of Mathematics Education*: *PME*	Umeå, Sweden	The effect of exposing students to Mathematics-News-Snapshots on their image of mathematics. (Presented as a *Poster*)	Presenting
Feb 2018 (*)	*the Conference of International Research Group on Physics Teaching (GIREP),*	San-Sebastian, Spain	Elevating Physics Teachers' Instruction Using Video-Based Didactics - A Model of Growth in Professional Awareness	Co-author
July 2017 (*)	*the Conference of International Research Group on Physics Teaching (GIREP)*	Dublin, Ireland	Using Self-video-based Conversations In Training Physics Teachers	Co-author
July 2017	*The 41st Conference of the International Group for the Psychology of Mathematics Education (PME)*	Singapore	Mentoring and collaborating on lesson plans as a means for training mathematics teachers towards teaching higher levels. (Presented as *Oral Communication*)	Presenting
July 2017	*The 41st Conference of the International Group for the Psychology of Mathematics Education (PME)*	Singapore	principles in designing technology-integrated geometry tasks for teaching teachers**. (**Presented as *Research Report*)	Participating as co-author
Sept 2016	*The Sixth Central- and Eastern European Conference on Computer Algebra and Dynamic Geometry*	Targu Mures, Romania.	The development of interesting connections between the radiuses of circles that are inscribed in or by triangles, and the discovery of unique features, with algebraic manipulations and dynamic exploration	Participating as co-author

	Systems in Mathematics Education, CADGME			
Sept 2016	*The Sixth Central- and Eastern European Conference on Computer Algebra and Dynamic Geometry Systems in Mathematics Education, CADGME*	Targu Mures, Romania.	Problem posing and problem-solving of geometrical configurations by integrating Dynamic Geometry Software	Participating as co-author
Aug 2016	*The 40th conference of the international group for the psychology of mathematics education PME*	Szeged, Hungary	Facilitating mathematics teachers' sharing of lesson plans (Presented as *Research Report*)	Presenting
July 2015	*The 9th Annual International Conference on Mathematics & Statistics: Education & Applications*	Athens, Greece	Making use of dynamic software and mathematical tools in the solution of extremum problems in geometry	Participating as co-author
July 2015	*The 9th Annual International Conference on Mathematics & Statistics: Education & Applications*	Athens, Greece	Surprising results of an investigation of loci using dynamic software	Presenting

Presentations in local professional conferences

Date	Name of Conference	Place of Conference	The subject of Lecture/Discussion	Role
July 2023 (*)	*The Annual International Conference on Creativity in Teaching*	Oranim Academic College of Education	Processes in practice in the Department of Mathematical Education and in the master's degree program in Prism's lens	Presenting
July 2023 (*)	*The Annual International Conference on Creativity in Teaching*	Oranim Academic College of Education	Examining the effects of an tecnological learning environment for teaching geometry using paper folding on student achievement and teacher attitudes.	Presenting
July 2023 (*)	*The Annual International Conference on Creativity in Teaching*	Oranim Academic College of Education	Implementing education in STEM approach combined with SEL processes and professional development of science and math	Presenting

			teachers	
July 2023 (*)	*The Annual International Conference on Creativity in Teaching*	Oranim Academic College of Education	Mathematics and science teachers attitute and emotions regarding the integration of technology into teaching	Presenting
July 2023 (*)	*The Annual International Conference on Creativity in Teaching*	Oranim Academic College of Education	TPACK & EMOTIONS - of math teachers and science that incorporate teaching technologies	Full session chairs (Symposium)
Feb. 2023 (*)	*JCRME11 - the 11th Jerusalem Conference on Research in Mathematics Education*	Lev Institute, Jerusalem, Israel	Science and mathematics teachers' attitudes regarding their TPACK and their emotions (as part of Symposiom)	Presenting
Feb. 2023 (*)	*JCRME11 - the 11th Jerusalem Conference on Research in Mathematics Education*	Lev Institute, Jerusalem, Israel	Analyzing the potential of existing teaching materials for imparting 21st century skills - The case of Mathematics News Snapshots (MNS) in mathematics. (as part of Working Group)	Presenting
July 2022 (*)	*The national conference for teaching mathematics in elementary education*	Online conference	Attitudes of mathematics and science teachers towards their technological knowledge in teaching, before and during the corona epidemic	Participating as co-author and leader of research group
July 2022 (*)	*The annual conference for study, perusal and creation*	Oranim College of Education	Sel Integrated with Steam at Oranim College of Education - Symposium Link	Presenting
Feb. 2022 (*)	*JCRME10 - the 10th Jerusalem Conference on Research in Mathematics Education* A-Zoom conference, February 9-10, 2022, pp.137-139.	Online conference	Personalization of mathematics teaching in reinforcement groups [In Hebrew]	Presenting
Feb. 2022 (*)	*JCRME10 - the 10th Jerusalem Conference on Research in Mathematics Education* A-Zoom conference, February 9-10, 2022, pp. 92-95.	Online conference	Students' perceptions of learning mathematics in the WhatsApp environment as part of a 'Bagroup' program[In Hebrew]	Participating as co-author
July 2021 (*)	*The 21 science conference of research study and creativity*	Oranim Colledge, Kiryat Tivon, Israel	Designing tasks using technological tools in teaching mathematics and science [In Hebrew]	Participating as co-author
July 2021 (*)	*The 21 science conference of research study and creativity*	Oranim Colledge, Kiryat	Teachers' perception on the contribution of integrating mathematical news snapshots in	Presenting

		Tivon, Israel	teaching to the development of mathematical knowledge for teaching [In Hebrew]	
June 2021 (*)	*Prizma – Leading the Assimilation of Technologies for Officials in Colleges and universities*.	Online conference	Integrating innovative technological environments in mathematics teaching that includes a task design process for students [In Hebrew]	Presenting
Feb. 2021 (*)	*JCRME9 - the 9th Jerusalem Conference on Research in Mathematics Education*	Online conference	**The Speed the time and the distance of learning and teaching on the social network", [In Hebrew]**	**(Invited Plenary Lecture)**
Feb. 2020 (*)	*JCRME8 - the 8th Jerusalem Conference on Research in Mathematics Education*	Lev Institute, Jerusalem, Israel	Integrating mathematical news snapshots in high-school mathematical lessons as a lever for developing mathematical knowledge for teaching. (presented as a Research Report).	Presenting
Feb. 2020 (*)	*JCRME8 - the 8th Jerusalem Conference on Research in Mathematics Education*	Lev Institute, Jerusalem, Israel	Mathematical discourse as a lever for understanding development the concepts area and perimeter of polygon among fifth grades students. (presented as a Research Report).	Presenting
Feb. 2020 (*)	*JCRME8 - the 8th Jerusalem Conference on Research in Mathematics Education*	Lev Institute, Jerusalem, Israel	How does ongoing exposure to mathematical news affect high school students' perceptions of mathematics? (presented as a Research Report).	Participating as co-author
Feb. 2020 (*)	*JCRME8 - the 8th Jerusalem Conference on Research in Mathematics Education*	Lev Institute, Jerusalem, Israel	The Contribution of integrating game-based tasks to mathematical and pedagogical Knowledge building of pre-service teachers (presented as a Research for Discussion)	Participating as co-author
January 2019 (*)	*JCRME7 - the 7th Jerusalem Conference on Research in Mathematics Education*	Lev Institute, Jerusalem, Israel	Self- video-based discourse as a tool for professional development of mathematics instructors (A Research Report)	Presenting
January 2019 (*)	*JCRME7 - the 7th Jerusalem Conference on Research in Mathematics Education*	Lev Institute, Jerusalem, Israel	On research in mathematics education in Israel - Reflections and appeals (Discussion group)	Co-presentation
July 2018 (*)	*Creativity in Teaching - International conference*	Oranim Academic College Education, Tivon	Developing a community of teachers as a lever to empower inexperienced teachers to teach 5 units of mathematics - the case of "Ramzor Latzafon (A Research	Presenting

			Report)	
February 2018 (*)	*JCRME6 - the 6th Jerusalem Conference on Research in Mathematics Education*	Lev Institute, Jerusalem, Israel	Design geometry tasks integrate technology into a teacher's learning environment. (A Research Report)	Presenting
February 2018 (*)	*JCRME6 - the 6th Jerusalem Conference on Research in Mathematics Education*	Lev Institute, Jerusalem, Israel	The mentoring model is a lever for the professional development of mathematics teachers at the level of 5 units. (A Research Report)	Presenting
February 2018 (*)	*JCRME6 - the 6th Jerusalem Conference on Research in Mathematics Education*	Lev Institute, Jerusalem, Israel	Math News Snapshots for high school students (A video poster)	Co-presentation
June 2017 (*)	*Meital Conference - Increased learning and teaching technology in higher education,*	Haifa University, Israel	A theoretical framework for designing geometry tasks integrates technology for in-service mathematics teachers' learning environment.	Participating as co-author
February 2017 (*)	*Entry into the teaching profession: a challenge and an opportunity*	Gordon College, Haifa	Project "Ramzor Latzafon" - Developing of teachers community as a lever to empowering inexperienced teachers for teaching at 5 units mathematics.	Presenting
Nov. 2016	*annual meeting of technology integration in Mathematics Education*	Gordon College, Haifa	Use of computer technology to study properties of conservation and change	Presenting
April 2016	*annual meeting of high school mathematics teacher*.	Shfayim, Israel	Teaching math in A level heterogeneous class, how to do it?.	Presenting
Feb 2016	*JCRME4 - the 4th Jerusalem Conference on Research in Mathematics Education*	Lev Institute, Jerusalem, Israel	Project "Ramzor Latzafon" - actions, insights, and challenges. Presented as a symposium	Co-presentation
March 2015	*annual meeting of high school mathematics teachers*	Shfayim, Israel	Loci with preservation properties using dynamic software	Presenting
March 2015	*annual meeting of high school mathematics teachers*	Shfayim, Israel	Ramzor Project.	Co-presentation
Oct 2014	*The Study conference*	Gordon College of Education, Israel	Finding a locus with a conserved property through a combination of mathematical tools and dynamic geometric software.	Presenting
Feb 2014	*The 15 science conference of research study and creativity*	Oranim Colledge, Kiryat Tivon,	Characterizing the knowledge and teaching of mathematics teacher educators.	Presenting

		Israel		

b. <u>Organization of Conferences or Sessions</u>

Date	Name of Conference	Place of Conference	Subject of Conference/ Role at Conference/ Comments	Role
2023 (*) June	*Passion and Professionalism in Teacher Education*	*The MOFET Institute, Tel Aviv*	Session Chair	Session orgenized and chair about Passion and professionalism informed by teachers' perspectives on technologically supported environments
2023 (*) January	*Research conference*	*The Faculty of Advanced Studies, Oranim College*	Head of the Master's degree program in Mathematics Education in the elementary grade	Initiates and leads the conference
2023 (*) February	*JCRME11 - the 11th Jerusalem Conference on Research in Mathematics Education*	*Lev Institute Jerusalem*	Symposium Chair	Session orgenized and chair about Integrating technology in mathematics and science teaching: aspects of technological pedagogical content knowledge and teachers' emotions.
2022 (*) July 30	The wonder of STEM and STEAM education: What, Why, and How?	Online – Mofet institude	Implementing STEAM Education	A member of Research & Development group and of the team leading the conference
2022	S-T-E-A-M! The Whole is	ZOOM - Oranim	Head of the Master's	Conducting an international symposium between Oranim College of education,

(*) May 30	Greater Than the Sum of its Parts	Academic College of Education	degree program in Mathematics Education in the elementary grade	the University of Ottawa, Canada, and CET- The Center for Educational Technology. Program & site
2022 (*) May 23	STEAM symposium	ZOOM - Oranim Academic College of Education	Head of Mathematics Education department in the elementary grade B.Ed.	Conducting a joint seminar for students at Oranim College Mathematics and Science in elementary school and high school: presentation of students' lesson plans using STEAM approach.
2021 (*)	SEL Integrated with STEM (SIS)		Head of the Master's degree program in Mathematics Education in the elementary grade	Conducting a seminar for Oranim College faculty from Mathematics and Science Education in elementary school and high school.
2020 (*)	A different way of Teaching science at the Elementary School in"	Faculty of Advanced Studies Oranim Academic College of Education.	Head of the Master's degree program in Mathematics Education in the elementary grade	Conducting a seminar for Primary School Science teachers and graduate students in Science Education programhttps://youtu.be/aWXS-sR58fg
2020 (*)	Integrating Technology in Online Mathematics Teaching at the Elementary School	Faculty of Advanced Studies Oranim Academic College of Education.	Head of the Master's degree program in Mathematics Education in the elementary grade	Conducting a seminar for Primary School Mathematics teachers and graduate students in Mathematics Education program https://youtu.be/2meFKVM518A
2019-2020 (*)	JCRME8 - the 8th Jerusalem Conference on Research in Mathematics Education	Lev Institute, Jerusalem, Israel	An academic meeting between researchers and presentation of research in mathematics education	Head of JCRME8
2018-2019 (*)	JCRME7 - the 7th Jerusalem Conference on Research	Lev Institute, Jerusalem, Israel	An academic meeting between researchers and presentation of	A Member JCRME7 conference program committee

	in Mathematics Education		research in mathematics education	

7. Invited Lectures\ Colloquium Talks

Date	Place of Lecture	Name of Forum	Presentation/Comments
March 2013	The Faculty of Education Science and Technology Technion Israel	Departmental seminar. Colloquium Talks	Characterizing the knowledge and teaching work of mathematics teacher educators
May 2015	Shannan College of Education	A joint meeting of the faculty of mathematics education of Shannan College and Gordon College members	Preservation and difference in geometry
June 2018 (*)	The Faculty of Education Science and Technology Technion Israel	Departmental seminar. Colloquium Talks	Research accompanying the "Ramzor North" project 2014-2017
Feb 2021 (*)	Online	Invited Lecture JCRME9 - the 9th Jerusalem Conference on Research in Mathematics Education	The Speed the time and the distance of learning and teaching on the social network [In Hebrew]
October 2021 (*)	Online	Invited Lecture Online Conference for Mathematics Teachers in Elementary School for the Druze-Circassian and Bedouin Sectors, the Northern District Ministry of Education	Integrating technology in mathematics teaching - from a static task in the textbook to a dynamic task What are the benefits of this?
March 2022 (*)	Online	Invited Lecture to department seminar in M-teach program at Oranim Academic College of Education	Self video based Curiosity Driven Discourse as a lever to enhance teachers' professional development
April 2022 (*)	Online	Invited Lecture to department seminar	Self video based Curiosity Driven

		in Preschool Education Department at Oranim Academic College of Education	Discourse as a lever to enhance pre-service teachers' professional development
May 2023 (*)	The Faculty of Mathematics Education, Girona University, Spain	Erasmus Mobility Invited three Lectures with Workshops	Geometric Inquiry activities with integration of technology - GeoGebra
September 2023 (*)	The Faculty of Mathematics Education, Bridewater University, Masachusets, USA	Invited Lecture to B.Ed. students of mathematics Education	The relationship between the construction process of geometric objects and their definition and properties

8. Research Grants

a. Grants Awarded

Role in Research	Co-Researchers	Topic and Publication	Funded by/ Amount	Year
Post-doctoral fellowship	Prof. Em. Nitsa Movshovitz-Hadar, and Prof. Atara Shriki	The contribution of the integration of Mathematical News Snapshots (MNSs) in high-school mathematics lessons to the development of teachers' Mathematical Knowledge for the Teaching (MKT) Publication D-5,7,14,15,16,17,18,22,33,35,37,44	The Faculty of Science and Technology Education Technion - Haifa, Israel. 209,000 NIS	2017-2019
Post-doctoral fellowship	Prof. Em. Nitsa Movshovitz-Hadar, and Prof. Atara Shriki	The Development of Professional Learning Communities (PLC) of Mathematics Teacher Publication D-6,25,29,43,46,50 E- 1,2	Samuel Neamann Institute for National Policy Studies, Haifa, Israel 120,000 NIS	2014-2016
PI (*)	Dr. Anat Klemer	The development of professional knowledge for teaching and levels of thinking during the collaborative planning and design of lesson plans in geometry combined with dynamic technological environments, in the	The Foundation for Applied Research in Training for Teaching and Education	2023-2024

		elementary school	The Mofet Institute, Tel Aviv, Israel	

b. <u>Submission of Research Proposals – Not Funded</u>

Role in Research	Co-Researchers	Topic	Funded by	Year	Score
PI (*)		21st-century competencies reflection in the Mathematics News Snapshots, as a basis for imparting these competencies during high school students' mathematics education	ISF – Israel Science Foundation	2022	
PI (*)	Dr. Boaz Silverman	Expanding Mathematical Knowledge for Teaching as a result of exposure to news from contemporary mathematics	ISF – Israel Science Foundation	2021	
PI (*)	Prof. Yaron Lehavi - The David Yellin Academic College of Education Dr. Avraham Merzel – The Hebrew University	Investigating mathematics and/or physics Teachers as participators in their peers' professional growth	MOFET A Research Institute	2020	
PI (*)	Prof. Atara Shriki from Oranim and Prof. Em. Nitsa Movshovitz-Hadar from Technion – Israel Institute of Technology	Employing interactive computer software for the benefit of the Practicum that prospective mathematics teachers go through during their Academic Teachers College studies	ISF – Israel Science Foundation	2018	

C. <u>Submission of Research Proposals</u>

Role in Research	Co-Researchers	Topic	Funded by	Year	Score

PI (*)	Dr. Klemer Anat	The development of professional knowledge for teaching and levels of thinking during the collaborative planning and design of lesson plans in geometry combined with dynamic technological environments, in the elementary school	The Fund for Applied Research in Training for Teaching and Education, Moffet Institute	2023-2024	

9. Scholarships, Awards, and Prizes

Date	**Funded by**	**Amount Research Scholarship**	**Research Topic**
2023	Erasmus Mobility	1650 Euro	Collaboration with mathematics teacher educators toward integration of technology in teaching and learning mathematics and STEM education
2022-2023	Oranim College Research Authority	10,000. NIS	Artificial intelligence applications to manage the personalization of mathematics teaching and learning
2022-2023	Oranim College Research Authority	15,000. NIS	Integrating technology in mathematics and science education – research group
2021-2022	Oranim College Research Authority	15,000. NIS	Integrating technology in mathematics and science education – research group
2021-2022	Oranim College Research Authority	10,000. NIS	Teachers as partners in the professional development of their peers
2020-2021	Oranim College Research Authority	10,000. NIS	The contribution of self-video-based discourse to the professional development of mathematics teachers
2018-2019	Oranim College Research Authority	5000. NIS	Integrating inquiry tasks in a technological environment
2017	Shannan College Research Authority	4000. NIS	Exploring geometric configurations in a technological environment
2016-2017	Oranim College Research Authority	8674. NIS	Integrating dynamic geometric software in

			mathematics teaching and learning
2015	Shannan College Research Authority	2000. NIS	Integrating technology in mathematics Education

10. Teaching

a. Courses Taught in Recent Years

Year	Name of Course	Type of Course Lecture/Seminar/ Workshop/High Learn Course/ Introduction Course (Mandatory)	Degree	Number of Students
2022-2023	Communicating 21st century skills during teaching	Seminar	M-teach	Oranim Academic College of Education
2022-2023	Integrating technology in high school mathematics instruction	Lecture and Workshop	M.Ed.	Oranim Academic College of Education
2019	Integrating technology high school mathematics instruction	Lecture and Workshop	The Rothschild-Weizmann MA program	Weizmann Institute
2018-to date	Mathematical Education Studies	Seminar – STEAM Education	B.Ed.	Oranim Academic College of Education
2017-2019	Non-routine mathematics problems Solution	Asynchronous online course	B.Ed.	Oranim Academic College of Education
2016-to date	Integrating technology in mathematics education junior and senior high school level	Lecture and Workshop	B.Ed.	Shannan Academic College of Education

2016	Number theory	Lecture	B.Ed.	Oranim Academic College of Education
2016	Integrating technology in 5 units (A level) high school mathematics instruction	Lecture and Workshop	The program to expand the scope of certification for high school mathematics teaching 5 units	Technion
2015-to date	Integrating technology in geometry instruction	Lecture and Workshop	M.Ed.	Oranim Academic College of Education
2015-to date	Master's project supervision	Seminar	M.Ed.	Oranim Academic College of Education
2015-to date	Teaching and learning mathematics through inquiry	Seminar	M.Ed.	Oranim Academic College of Education
2013-2018	Didactic of mathematics, junior high school, and senior high school level	Lecture and Workshop	B.Ed.	Shannan Academic College of Education
2012-to date	Analytic geometry integrated technology approach junior and senior high school level	Lecture and Workshop	B.Ed.	Shannan Academic College of Education
2011	Analytic Geometry integrated technology approach	Lecture and Workshop	M-teach program	Oranim Academic College of Education

2011-2012	statistics	Lecture	B.Ed.	Oranim Academic College of Education
2011-2018	Didactic of mathematics, junior high school level	Lecture and Workshop	B.Ed., B.Sc.	Oranim Academic College of Education
2011-2018	Didactic of mathematics, senior high school level	Lecture and Workshop	B.Ed., B.Sc.	Oranim Academic College of Education

b. <u>Supervision of Graduate Students</u>

Name of Student	Title of Thesis	Degree	Date of Completion / in Progress	Students' Achievements
Flayer Erez M-teach student	Characterization of the pedagogical-technological knowledge mathematics teachers transferred from remote teaching during the Corona to face-to-face teaching	M.Ed.	November 2023	
Genin Natalia	Professional development of a primary math teacher during the posing and teaching of sustainability issues problem	M.Ed.	January 2023	83
Herman Yardena	An elementary school math teacher's perception of the contribution of integrating children's stories in math lessons to the development of her mathematical and pedagogical knowledge	M.Ed.	December 2022	90
Noencha Nasrin	The contribution of integrating technological tools in teaching the multiplication table to the development of the knowledge and skill of an	M.Ed.	December 2022	89

	elementary school teacher			
Zvidat Duaa	The contribution of teaching fractions in the inquiry approach with visual aids for the knowledge of mathematics teachers in elementary school	M.Ed.	December 2022	83
Hattib Assil	The contribution of integrating non-routine problems in teaching mathematics in elementary school, to the knowledge of a teacher at the beginning of his career.	M.Ed.	December 2022	90
Cohen Einav	The attitudes and beliefs of mathematics teachers regarding algebraic thinking and its integration into the teaching of mathematics in elementary school	M.Ed.	November 2022	89
Amal Yaakov	Characterizing the challenges of a mathematics teacher reflected in the process of connecting unconventional problems to first graders	M.Ed.	December 2021	89
Livnat Karasenty	Characterization of the contribution of posing and integrating open problems in mathematics to the pedagogical and mathematical teacher's knowledge	M.Ed.	December 2021	92
Amal Bokaei	The contribution posing and integrating problems about mathematics in nature to the development of teacher knowledge	M.Ed.	in Progress	99
Nahaeya Chamud	Challenges of Mathematics Teachers in the Process of Posing and Integrating Non-Routine Problems in	M.Ed.	December 2021	86

	Elementary School Mathematics			
Affiffa Chir Aldin	The contribution of posing and integrating mathematical problems regarding intelligent consumption in the elementary school for the development of mathematical knowledge for teaching	M.Ed.	December 2021	96
Nariman Hosein	Characterization of teacher knowledge in the process of posing and integrating mathematical problems connected everyday life with multiplication and division for fourth graders	M.Ed.	December 2021	96
Arrin Hallil	Problems posing and integrating regarding the area and perimeter of a rectangle	M.Ed.	in Progress	96
Tavor Keren	Development of a study unit on the subject: Financial education for sixth-grade students	M.Ed.	July 2020	100
Goren Hadas	Characterization of the knowledge and the skills of a teacher instructor for mentoring mathematics teacher biased personal principles – a case study	M.Ed.	July 2020	94
Tapilzki Luba	Teacher's perception of the illustrations' contribution to understanding and reasoning processes through solving a problem	M.Ed.	July 2019	89
Cohen Yamit	Teacher's perception on the contribution of explicit instruction and writing diary discussion to fourth graders students' mathematical reasoning development	M.Ed.	July 2019	97

Cohen Michal	Development of a study unit on the integration of Fractals in teaching geometry and mathematics	M.Ed.	July 2019	**100**
Levi Hili	Development of a study unit on geometry in art in the museum	M.Ed.	July 2019	**94**
Shushlev Irena	Teacher perception of the contribution of extracurricular learning to students' motivation and understanding of length measurement	M.Ed.	July 2019	**91**
Saidda Hibba	Mathematical discourse as a lever for understanding the concepts of polygons "area" and "perimeter" among 5th graders	M.Ed.	September 2018	**96**
Yuniss Amal	Transferring the concept of line symmetry from mathematics to everyday life	M.Ed.	September 2018	**91**
Ben-David Marva	Illustrations as a strategy for solving mathematical questions in mathematics among fifth graders	M.Ed.	July 2017	**96**
Cohen Dganit	Students' perceptions of the containment relationship In parallelograms family	M.Ed.	Oct 2016	**95**

11. Professional Experience

1989-2012	Junior & senior high schools (grades 7th -12th) Mathematics Teacher at senior 5 units level (A level), including preparing students for their matriculation exams in three high schools: Geon-Hayarden school - kibbutz Neve Eitan - 12 years; Brener school - kibbutz Givat Brener – 11 years.
1996-1997	Participated in the "Manor" program for developing mathematics teacher educator's leadership, Feinberg College, Weizmann Institute of Science.
2001–2002	Member of the leader team of mathematics teacher educators in the "Tomorrow 98" project, Upper Galilee, Israel.
2003-2010	A district supervisor of school Mathematics, in charge of a team of over 25 school supervisors of mathematics teaching at the senior high school grades (10^{th} -12^{th}), Ministry of Education, North district Israel.

2007-2010	Pedagogic School Director "Geon Hayarden", Emek Hamaayanot.
2011-2016	National supervisor, assistant to the superintendent of school mathematics, in charge of a team of over 20 regional supervisors of mathematics teaching at the senior high school grades (10^{th} -12^{th}).
2017-2020	Chairman of the education system at Kibbutz Nir David, Israel. Leading the formal and informal education policy in Kibbutz Nir David, assimilating the policy and decisions of the Ministry of Education.
2017	Team member and researcher in the project "Ramzor to Rishon Lezion - Mathematical Greenhouse" - development of leadership mathematics teachers. Funded by the Trump Foundation, led by Prof. Atara Shriki.
2020-2021	Leader of the community of mathematics coordinators in Shefar'am - leadership development for leading excellence in mathematics education. Funded by the Trump Foundation, led by Prof. Boris Koichu.
2021	Member of the Education Committee that accompanies the Footprints in the Valley Museum. An Educational Experience in Gan Hashlosha National Park.
2021	Participating in "Alumot" a program for leaders in an academic institution, program on behalf of the Prime Minister's Office, Mofet Institute, Tel Aviv, Israel
2021	Member of the Steering Committee of the National Forum on the Research-Practice Partnership (RPP), led by Dr. Adiv Gal and Dr. Dafna Gen, Office of the Chief Scientist Ministry of Education.
2021-to date	Member of the Steering Committee of the National Forum on the interdisciplinary wonders of education for STEAM, led by Prof. Shriki, A., and Dr. Rigoris, N. Mofet institute.https://mofet-web.macam.ac.il/iun/m-event/steam-education/
2021-to date	Establishment and management of inter-college research groups as part of the Research Authority at Oranim College which focuses on diverse aspects of "Integrating diverse technologies in teaching and research mathematics and science education".

PUBLICATIONS

A. Ph.D. Dissertation

Characterizing the knowledge and teaching work of mathematics teacher educators. Advisors: Prof. Boris Koichu; Prof. Orit Zaslavsky, Submitted in July 2013. [in Hebrew, 158 pages]

B. Articles in Refereed Journals (Total number of citations: **70**)

Published

1. **Segal, R**., & Stupel, M. (2014). Investigation tasks incorporating computerized technology with conserved property and generalization. *Electronic Journal of Mathematics and Technology.* Vol. *9*(2), pp. 124-137. (Number of citations: 5)
   https://php.radford.edu/~ejmt/deliverAbstract.php?paperID=eJMT_v9n2p1
   Research Journal of Mathematics and Technology (2015). Vol. *4*(2).
2. **Segal, R**., Oxman, V. & Stupel, M. (2015). Dynamic investigation of loci using different mathematical proofs**,** *Shannan college journal* Vol 21, pp. 121-140. [In Hebrew].

http://shaanan.ac.il/wp-content/uploads/2015/07/9.pdf.pdf

3. **Segal, R**., Stupel, M. & Oxman, V. (2015). Investigating loci in a technology environment, what we can learn from?, *Aleh – The Israel Journal for High School Mathematics Teachers*, Vol. 52, pp. 7-17 [In Hebrew].
   http://www.atiner.gr/papers/EMS2015-1633.pdf
4. Katz, S., **Segal, R**., & Stupl, M. (2015). Proofs without words in geometry: A trigger to self-efficacy and mathematical argumentation. *Far East Journal of Mathematical Education*, Vol. *16*(1), pp. 21-56. (Number of citations: 2)
5. **Segal, R**., Stupel, M., & Oxman, V. (2016). Dynamic investigation of loci with surprising outcomes and their mathematical explanations, *International Journal of Mathematical Education in Science and Technology*, Vol. *47*(3), pp. 443-462. **(sjr: Q2)** (Number of citations: 2) http://www.tandfonline.com/eprint/WPMwrksiAtkgw7JqdYwV/full
6. Katz, S, **Segal, R**., & Stupel, M. (2016). Using the working backwards strategy for problem-solving in teaching mathematics to foster mathematics self-efficacy. *Journal of Pure and Applied Mathematics: Advances and Applications* Vol. *15*(2), pp. 107-144. (Number of citations: 3)
7. Stupel, M., **Segal, R**. & Oxman, V. (2016). Teaching locus with a conserved property by integrating mathematical tools and dynamic geometric software. *ASMJ - Australian Senior Mathematics Journal*, Vol. *30*(1), pp. 25-44. (Number of citations: 1)
8. Stupel, M., **Segal, R**., & Flores, A. (2016). Hidden properties of the equilateral triangle. *North American GeoGebra Journal*, Vol. *5* (1) pp. 28-39.
   http://www.geogebrajournal.com/index.php/ggbj/article/view/86/85
9. Sigler, A., **Segal, R**., & Stupel, M. (2016): The standard proof, the elegant proof, and the proof without words of tasks in geometry, and their dynamic investigation, *International Journal of Mathematical Education in Science and Technology*, DOI: 10.1080/0020739X.2016.1164347 pp.1226-1243. **(sjr: Q2)** (Number of citations: 5)
   http://dx.doi.org/10.1080/0020739X.2016.1164347
   https://www.tandfonline.com/eprint/5wBTWeHZGRiFJHmgCrsP/full?target=10.1080/0020739X.2016.1164347
10. **Segal, R**., Stupel, M., & Flores, A. (2016). Examples of multiple proofs in geometry: Part 1, tasks, and hints. *The Ohio Journal of School Mathematics*, No.7, pp. 35-43. (Number of citations: 1) http://bit.ly/OJSM_Multiple_Proofs . Full Fall 2016 Issue: http://bit.ly/OJSM_Fall2016_Full
11. Oxman, V., Stupel, M. & Segal, R. (2016). On teaching extrema triangle problems using dynamic investigation. International Journal of Mathematical Education in Science and Technology, (online), pp.1-14. (sjr: Q2) (Number of citations: 2) http://dx.doi.org/10.1080/0020739X.2016.1259514
    https://www.tandfonline.com/eprint/zRaHefubUvBSYQ7DYJD4/full?target=10.1080/0020739X.2016.1259514
12. (*) **Segal, R**., Sigler, A., & Stupel, M. (2017). Some more surprising properties of the "king" of triangles, *Journal for Geometry and Graphics, the journal of ISGG the International Society for Geometry and Graphics*, Vol. 21, No.1, pp. 79-88. **(sjr: Q4)**
13. (*) **Segal, R**., Sigler, A., Stupel, M. (2017). A collection of interesting geometric features accompanied by proof that enables investigation while presenting conservation. *Research and Study in Mathematics Education*. Vol. 5, pp. 100-117. [In Hebrew]

14. (*) **Segal, R**., Stupel, M., Sigler, A. (2017). Surprising Geometrical Properties that are Obtained by Transformation any Quadrilateral into Lattice. *The Electronic Journal of Mathematics and Technology,* Vol. 11, no. 1, pp. 58-66.
15. (*) **Segal, R**., Stupel, M., Sigler, A. (2017). Hidden features of an equilateral triangle - discovery integrating technological tools, *Sha-anan college journal* Vol 22, pp. 251-277. [In Hebrew].
16. (*) Sigler, A., **Segal, R**., Stupel, M. (2018). Surprising geometric feature obtained by transformation of any grid square, Sha-anan college journal, Vol. 23, pp. 147-160. [In Hebrew].
17. (*) **Segal, R**., Stupel, M., Sigler. A., Jahangiril, J. (2018). The effectiveness of the 'what if not' strategy coupled with dynamic geometry software in an inquiry-based geometry classroom. *International Journal of Mathematical Education in Science and Technology.* Vol.4, no. 7, pp: 1099-1109. DOI: 10.1080/0020739X.2018.1452302 https://www.tandfonline.com/eprint/T5wNAX32MShUmsnZaNkr/full **(sjr: Q2)** https://www.tandfonline.com/eprint/T5wNAX32MShUmsnZaNkr/full?target=10.1080/0020739X.2018.1452302
18. (*) Oxman, V., **Segal, R**., Stupel, M. (2019). A dynamic exploration of the preservation and modification of features that occur when applying a reflection on a point that is inside, above, and outside of different geometric shapes, Including general case inclusion. *Shannan college journal* Vol 26, pp. 114-120. [In Hebrew].
19. (*) Jahangiril, J., **Segal, R**., Stupel, M. (2021). Angle-side properties of polygons inscribable in an ellipse. *International Journal of Mathematical Education in Science and Technology.* https://www.tandfonline.com/eprint/5GJI8YTEIVNRK2MUSAXA/full?target=10.1080/0020739X.2021.1919769 **https://doi.org/10.1080/0020739X.2021.1919769 (sjr: Q2)**
20. (*) **Segal, R**., Oxman, V., & Stupel, M. (2021). Using Dynamic Geometry Software to Enhance Specialized Content Knowledge: Pre-Service Mathematics Teachers' Perceptions. International Electronic Journal of Mathematics Education, 16(3), em0647. **(sjr: Q3)** **https://www.iejme.com/download/using-dynamic-geometry-software-to-enhance-specialized-content-knowledge-pre-service-mathematics-11065.pdf**
21. (*) **Segal, R**. & Stupel, M. (2021). On an inequality between the side lengths of a triangle. *North American GeoGebra Journal* Volume 9, Number 1, ISSN 2162-3856.
22. (*) Stupel, M. & **Segal, R.** (2021). A proof without words for a challenging problem, all with the help of Auxiliary Constructions. In the International Journal for Technology in Mathematics Education (IJTME) (U. K), Vol. 28 no.4 (sjr: Q4)
23. (*) Stupel, M. **& Segal, R**. (2021). Two Proofs without Words to the same task in geometry. *Journal Learning and Teaching Mathematics*, LTM issue 31, p. 42.
24. (*) **Segal**, R. & Stupel, M. (2021). Dynamic Research into Forms Obtained from Van-Aubel's Theorem When the Quadrilateral Degenerates to a Line-Segment. *Resonance Journal of Science Education*, Vol. 27, no. 9, pp. 1629-1643. **(sjr: Q3)** DOI: 10.1007/s12045-022-1454-7. View and download PDF, https://rdcu.be/cWgW7
25. (*) **Segal**, R., & Stupel, M. (2023). Pre-service mathematics teachers investigating the attributes of inscribed circles by technological and theoretical scaffolding. *International Electronic Journal of Mathematics Education*, 18(1), em0726. https://doi.org/10.29333/iejme/1280

26. (*) Klemer, A., **Segal, R**., Miedijensky, S., Herscu-Kluska, R., & Kouropatov, A. (2023). Changes in the attitudes of mathematics and science teachers toward the integration and use of computerized technological tools as a result of the COVID-19 pandemic. *Eurasia Journal of Mathematics, Science and Technology Education, 19*(7), em2295. https://doi.org/10.29333/ejmste/13306 **(sjr:Q2)**

27. (*) Segal, R., Merzel, A. & Lehavi, Y. (2023). improving the professional awareness of mathematics teachers and teacher instructors using video-based curiosity-driven discourse – a case study. *International Journal of Science and Mathematics Education***.** Published online. DOI 10.1007/s10763-023-10418-2 **https://rdcu.be/dm6sH** **(sjr: Q1). https://trebuchet.public.springernature.app/get_content/d6d283d7-640e-4dd8-a955-845a225420da**

    Link to full text

Accepted for Publication

C. Articles or Chapters in Scientific Books (which are not Conference Proceedings)

Published

1. **Segal, R**., & Biton, Y. (2015). Integrating technology in geometry instruction. Geometry constructions: classic, challenging & computerized problems. In: *Stupel, M. & Ziskin, K. (Eds.). Shannan College Publishing. Chapter* 8, pp. 211-233. [In Hebrew]
2. (*) **Segal, R**., & Stupel, M. (2018). Geometry research task integrating technology. Accepted for publication in Levenberg, I. & Patkin, D. (Eds.): The many aspects of geometry – From research to practice in geometry teaching. Tel Aviv: Mofet institute. [In Hebrew].
3. (*) Perll, H., Neria. D., **Segal, R**., & Sion. N. (2018). Mathematics teachers' support-team at the Israel Ministry of Education: Structure, roles, and activities. Accepted for publication in Movshovitz-Hadar. N. (Editor): p. 37-50. Israel Mathematics Education K-12. A book to be published in 2018 by World Scientific Publishing House, Singapore, as a part of the Series on Mathematics Education. (Number of citations: 2) **http://www.worldscientific.com/worldscibooks/10.1142/10741**
4. (*) Lehavi, Y., Merzel A., **Segal R**., Baram A., Eylon BS. (2019). Using Self-video-based Discourse in Training Physics Teachers. In: McLoughlin E., van Kampen P. (Eds) Concepts, Strategies and Models to Enhance Physics Teaching and Learning, pp. 159-170, Springer, Cham. https://doi.org/10.1007/978-3-030-18137-6_14
5. (*) Biton, Y., & **Segal, R.** (2021). Learning and Teaching Mathematics with Online Social Networks: The Case of Facebook. *Teacher Education: New Perspectives*, *21*, 59. First online: https://www.intechopen.com/online-first/learning-and-teaching-mathematics-with-online-social-networks-the-case-of-facebook(Downloaded: 139). The book: http://www.intechopen.com/books/teacher-education-new-perspectives.
6. (*) Movshovitz-Hadar N., Shriki, A**., Segal**, R., Silverman, B., (Accepted 2023): "Narrowing the Gap Between School Mathematics and Contemporary Mathematics -- Lessons Learned from a Four-Phase Curriculum Research and Development Study." In Denisse R. Thompson, Mary Ann Huntley, and Christin Suurtamm (Eds.) Lessons Learned from Research on Mathematics Curriculum, a volume in the series Research in Mathematics

Education. To be published by Information Age Publishing.

D. Articles in Conference Proceedings

Published

Refereed papers published in international conference proceedings

1. Oxman, V., Stupel, M., & **Segal, R**. (2015). Making use of dynamic software and mathematical tools in the solution of extremum problems in geometry. Presented at published in the proceeding of the 9th *Annual International Conference on Mathematics & Statistics: Education & Applications*, July 2015 Athens, Greece. http://www.atiner.gr/papers/EMS2015-1633.pdf
2. **Segal, R**., Oxman, V., & Stupel, M. (2015) Surprising results of an investigation of loci using dynamic software Presented at and published in the proceeding of the 9th *Annual International Conference on Mathematics & Statistics: Education & Applications*, July 2015 Athens, Greece. http://www.atiner.gr/papers/EMS2015-1779.pdf
3. **Segal, R**., Shriki, A. & Movshovitz-Hadar, N. (2016): "Facilitating mathematics teachers' sharing of lesson plans." Presented as *Research Report* by R. Segal and published in: Csikos, C., Rausch, A., & Szitanyi, J. (Eds.). *Proceedings of the 40th conference of PME - the international group for the psychology of mathematics education*, V. 4, p. 171-178., Szeged, Hungary, Aug. 3-7, 2016.
4. Sigler, A., Oxman, O., & **Segal, R**. (2016). The development of interesting connections between the radiuses of circles that are inscribed in or by triangles, and the discovery of unique features, with algebraic manipulations and dynamic exploration. [ANNOTATION (PDF), PRESENTATION (PDF)] . Presented at and published as no. 41 in the proceedings of *CADGME-2016* The Sixth Central- and Eastern European Conference on Computer Algebra and Dynamic Geometry Systems in Mathematics Education, Targu Mures, Romania.
5. **Segal, R**., Sigler, A., & Stupel, M. (2016). Problem posing and problem-solving of geometrical configurations by integrating Dynamic Geometry Software [ANNOTATION (PDF), PRESENTATION (PDF)] Presented at and published as no. 39 in the proceedings of *CADGME-2016* The Sixth Central- and Eastern European Conference on Computer Algebra and Dynamic Geometry Systems in Mathematics Education, Targu Mures, Romania.
6. (*) Ovadia. T, **Segal. R**. (2017). Principles in designing technology-integrated geometry tasks for teaching teachers**.** Presented as *Research Report* in Kaur, B., Ho, W.K., Toh, T.L., & Choy, B.H. (Eds.). (2017). *Proceedings of the 41st Conference of the International Group for the Psychology of Mathematics Education*, Vol. 3, pp. 353-362. Singapore: PME.
7. (*) **Segal. R**., Shriki. A., & Movshovitz-Hadar. N. (2017). Mentoring and collaborating on lesson plans as a means for training mathematics teachers towards teaching higher levels. Presented as *Oral Communication* in Kaur, B., Ho, W.K., Toh, T.L., & Choy, B.H. (Eds.). (2017). *Proceedings of the 41st Conference of the International Group for the Psychology of Mathematics Education*, Vol. 1, pp.267 Singapore: PME.
8. (*) Lehavi, Y. and Merzel, A. , **Segal, R**., Baram, A., Eylon, B-S. (2017). Using Self-video-based Conversations In Training Physics Teachers. Presented at the Girep 2017 conference, Dublin, Ireland. published in McLoughlin, E. (Ed), van Kampen, P. (Ed) (2019). Concepts,

Strategies and Models to Enhance Physics Teaching and Learning (accepted for publication in selected papers for proceedings Print Publication Date: Aug-2019)

9. (*) Merzel, A., Lehavi, Y., **Segal, R**., Baram A., Eylon B-S. (2018). "Elevating Physics Teachers' Instruction Using Video-Based Didactics - A Model of Growth in Professional Awareness" Talk presented at the Conference of International Research Group on Physics Teaching (GIREP), San-Sebastian, Spain
10. (*) Movshovits-Hadar. N., Shriki. A., **Segal. R**. (2018). The effect of exposing students to Mathematics-News-Snapshots on their image of mathematics. Presented as a *Poster* and published in Bergqvist, E., Österholm, M.,Granberg, C., & Sumpter, L. (Eds.). (2018). *Proceedings of the 42nd Conference of the International Group for the Psychology of Mathematics Education*. Vol. 5, pp. 270. Umeå, Sweden: PME.
11. (*) Ovadiya. T., **Segal. R**. (2018). Graduate students' conceptual understanding of shifting between representations. Presented as a *Poster* and published in Bergqvist, E., Österholm, M.,Granberg, C., & Sumpter, L. (Eds.). (2018). *Proceedings of the 42nd Conference of the International Group for the Psychology of Mathematics Education*. Vol. 5, pp. 277. Umeå, Sweden: PME.
12. (*) **Segal. R**., Lehavi. Y, Merzel. A., Baram. A., Eylon. B. (2018). Using self-video-based conversation in training mathematics teacher instructors. Presented as *Research Report* and published in Bergqvist, E., Österholm, M., Granberg, C., & Sumpter, L. (Eds.). (2018). *Proceedings of the 42nd Conference of the International Group for the Psychology of Mathematics Education.* Vol. 4 pp. 139-146. Umeå, Sweden: PME.
13. (*) **Segal. R**., Ovadiya. T. (2018). Pre-service teachers' knowledge about shifting between function representations . In B. Maj-Tatsis (Ed.), *Mathematics in the real world Presented as Research Report in the proceeding Contemporary Mathematics Education conference (CME*), p. 241-250 Varsha, Poland. **http://cme.rzeszow.pl/index.php?&p=2018/book**
14. (*) Movshovitz-Hadar. N., Shriki. A., **Segal. R**., Zigerson. V., Silverman. B., Shir. K. (2018). Closing the gap between school mathamtics and conteporary mathematics: introducing students to MathematicS-News-Snapshots. In B. Maj-Tatsis (Ed.), *Mathematics in the real world Presented as Workshop in the proceeding Contemporary Mathematics Education conference (CME)*, p. 47-49 Varsha, Poland.
15. (*) Movshovitz-Hadar, N., **R. Segal**, K. Shir, A. Shriki, B. Silverman, V. Zigerson. (2018). "Introducing High-School Students To Contemporary Mathematics Through Mathematics-News-Snapshots: Networking With Mathematics Educators About Meeting the Challenge." Presented at and published in the proceedings of ICERI2018 – the 11th Annual International Conference of Education, Research and Innovation, pp. 1862-1865, Seville, Spain,12th-14th Nov. 2018. **ISBN:** 978-84-09-05948-5. **ISSN:** 2340-1095.
16. (*) **Segal, R**., Shriki, A., Movshovitz-Hadar, N., and Silverman ,B. (2019). "Interweaving Mathematics News Snapshots as a facilitator for the development of mathematical knowledge for teaching." Presented at CERME 11 TWG18b and published in: U. T. Jankvist, M. van den Heuvel-Panhuizen & ,M. Veldhuis (Eds.),*Proceedings of the Eleventh Congress of the European Society for Research in Mathematics Education* ,pp .3497-3504 .(Utrecht, the Netherlands: Freudenthal Group & Freudenthal Institute, Utrecht University and https://hal.archives-ouvertes.fr/hal-NUMBER
17. (*) Movshovitz-Hadar, N., **Segal, R**., Shir, K., Shriki, A., Silverman, B**,.**Zigerson **,**S. (2019). "Refreshing High School Curricula with Mathematics-News-Snapshots". A paper providing background for leading a discussion session at NCTM research conference, April 3, 2019, San Diego Convention Center, California.
18. (*) Movshovitz-Hadar, N., **Segal, R**., Shir, K., Shriki, A., Silverman, B., & Zigerson, V.

(2019). High-school teachers' professional development towards interweaving contemporary disciplinary knowledge in school: The case of Mathematics-News-Snapshots. A workshop presented *The 7th International Conference on Teacher Education: The Story of Innovation in Teacher Education.* Mofet Institute, Israel.

19. (*) Saaida. H, **Segal. R**. (2019). Mathematical Discourse as a Lever for Understanding the Concepts of "Area" and "Perimeter" among Fifth Graders. *Presented as a Poster Presentation at The Story of Innovation in Teacher Education*, MOFET Institute, Tel-Aviv, Israel.
20. (*) Lehavi. Y, Merzel. A., **Segal. R**., Baram. A. (2019). Teachers as mentors of teachers: A new dimension in teachers professional development. *Presented as a Workshop Group at The Story of Innovation in Teacher Education*, MOFET Institute, Tel-Aviv, Israel.
21. (*) **Segal. R**., Oberman. J., Stupel. M. (2019) Integrating the "What if not?" Enquiry Method Using Technology for Developing Students' Mathematical Knowledge for Teaching. *Presented as a Research Report* at *The Story of Innovation in Teacher Education*, MOFET Institute, Tel-Aviv, Israel.
22. (*) **Segal. R**., Segal. D. (2019). Educational and Experiential Activities, for Students and Teachers of Mathematics and Sciences, in a Classical Museum of Archeology. International conference, *The Future of Education*, Florence https://conference.pixel-online.net/FOE/conferenceproceedings.php
23. (*) **Segal. R**., Lehavi. Y, Merzel. A., Baram. A., Eylon. B. (2019). Self-video-based discourse as a lever for developing pre-service Mathematical Knowledge for Teaching. International conference, *The Future of Education*, Florence https://conference.pixel-online.net/FOE/conferenceproceedings.php
24. (*) Lehavi, Y., Merzel, A., **Segal, R**., Baram, A. (2019) "Employing Curiosity-Driven Video-Based Discourse to Facilitate Teachers as Mentors of Teachers" Workshop presented at the Conference of European Science Education Research Association (ESERA), Bologna, Italy
25. (*) Movshovitz-Hadar, N., **Segal, R**., Shir, K., Shriki, A., Silverman, B., Zigerson, V. (2019). "Bridging Between School Mathematics and Contemporary Mathematics: Turning a Dream into Reality". Presented at and published in Alan Rogerson and Janina Morska (eds.) The proceedings of the 15th International Conference of The Mathematics Education for the Future Project *Theory and Practice: An Interface or A Great Divide?* 4-9 Aug. 2019 Maynooth University, Kildare, Ireland. p. 407-412. https://directorymathsed.net/public/Ireland/IrelandPapersPDF&Docx/Movshovitz%20et%20al%20(6)W2.pdf
26. (*) **Segal, R**., Shriki, A., Movshovitz-Hadar, N.(2020). "Ramzor – A Digital Environment that Constitutes Opportunities for Mathematics Teachers Collaboration, " Presented (by R. Segal) at and published in Hilda Borko & Despina Potari (Eds.) ICMI 25 conference-proceedings : *Teachers of Mathematics Working and Learning in Collaborative Groups. Theme D* . The International Commission on Mathematical Instruction, Lisbon, Portugal, 3-7 February 2020 (pp. 692-699) https://www.ucviden.dk/ws/portalfiles/portal/112153257/201114_ICMI25Proceedings6.13.2020.pdf#page=706
27. (*) Segal, R., Shriki, A., Silverman, B., Movshovitz-Hadar, N. (2021): "Interweaving Mathematics-News-Snapshots in Class: Implications for Teachers Horizon Content Knowledge." Presented online (by R. Segal) at and published in the proceedings of *ICME-14: The 14th The International Congress on Mathematical Education*, Shanghai. Topic Study Group. (icme14.org). https://www.icme14.org/static/en/news/37.html?v=1631685744427 .
28. (*) Movshovitz-Hadar, N., **Segal, R**., Shir, K., Shriki, A., & Silverman, B. (2021). A multi-stage attempt at narrowing the gap between contemporary mathematics and High school

mathematics. Presentated online (by N. Movshovitz-Hadar) at and published in the proceedings of *ICME-14: The 14th The International Congress on Mathematical Education*, Shanghai. Topic Study Group. (icme14.org). https://www.icme14.org/static/en/news/37.html?v=1631685744427

29. (*) Lehavi, Y., **Segal, R**., Merzel, A. (2021). Introducing Pedagogical Content Awareness to Model Growth in the Context of Teacher Peer. Accepted for Presentation at Symposium on New Perspectives on Teacher Learning: Teachers as Facilitators of their Peers', and published in the proceedings *of AREA- American Educational Research Association Virtual Annual Meeting, Accepting Educational Responsibility*, 8th –2th April 2021**.**
30. (*) Jutkowitz, R., Merzel, A., **Segal, R**., Lehavi, Y. (2021). Curiosity-Driven Discourse as an Opportunity for Mentors' Professional Growth as Teachers. Accepted for Presentation at Symposium on New Perspectives on Teacher Learning: Teachers as Facilitators of their Peers', and published in the proceedings *of AREA- American Educational Research Association Virtual Annual Meeting, Accepting Educational Responsibility*, 8th –2th April 2021**.**
31. (*) **Segal,** R., Merzel, A., Lehavi, Y. (2021). Heightening Teachers' Professional Awareness in Video-Based Peer Discourse to Develop Specialized Content Knowledge. Accepted for Presentation at Symposium on New Perspectives on Teacher Learning: Teachers as Facilitators of their Peers', and published in the proceedings *of AREA- American Educational Research Association Virtual Annual Meeting, Accepting Educational Responsibility*, 8th – 2th April, 2021**.**
32. (*) Segal, R. and Biton, Y. (2022). Teachers' perceptions of teaching and learning mathematics in the WhatsApp environment through the "Bagroup" project. Presented at CERME 12 TWG15 and will published in: Hodgen, J., Geraniou, E., Bolondi, G., Ferretti, F. Organised (Eds.), *Proceedings of the Twelve Congress of the European Society for Research in Mathematics Education* ,pp 2610-2617, Free University of Bozen-Bolzano.
33. (*) Biton, Y., Segal, R. and Fellus, O. (2022). Students' perceptions of learning mathematics in the WhatsApp environment through the Bagroup project. Presented at CERME 12 TWG8 and will published in: Hodgen, J., Geraniou, E., Bolondi, G., Ferretti, F. Organised (Eds.), *Proceedings of the Twelve Congress of the European Society for Research in Mathematics Education* ,pp 1319-1326, Free University of Bozen-Bolzano https://hal.science/hal-03745590/document
34. (*) Segal, R., Levi, Y. and Movshovitz-Hadar, N. (2022). Personalization of mathematics teaching based on student's mathematical-coMmunication-forms. Presented as Poster and published 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. 404). Alicante, Spain: PME.
35. (*) Segal, R., Levi, Y., Movshovitz-Hadar, N. (2022). Personalization of mathematics teaching based on student's mathematical-communication-forms – Presented as Oral presentation and will published in *the 6th International conference on advanced research in education teaching and learning procceding*, University College of Dublin (UCD) Dublin, Ireland https://www.dpublication.com/wp-content/uploads/2022/07/17-7166.pdf
36. (*) Segal, R., Eldar, O. (2022). Designing and Implementing a Seminar for B.Ed. students from Mathematical and Science Education: Teaching inquiry using the STEM Approach. Presented as Oral Presentation and will be published *in the proceeding 15th annual International Conference of Education, Research and Innovation, transforming education*

transforming lives, 7th-9th, pp, 4238-4244 Seville, Spain. https://library.iated.org/publications/ICERI2022

37. (*) Segal, R., Merzel, A., & Lehavi, Y. (2023). Using evidence-based Curiosity-Driven Discourse for enhancing mathematics teacher's instructor's professional awareness. Will be published in *the proceeding* of *Passion and Professionalism in Teacher Education International conference, The MOFET Institute, Tel Aviv.*
38. (*) Lehavi, Y., Merzel, A., Segal, R. (2023). Pedagogical content awareness: a possible framework to study teachers mentoring. Will be published in *the proceeding of Passion and Professionalism in Teacher Education International conference, The MOFET Institute, Tel Aviv.*
39. (*)Segal, R., Miedijensky, S., Klemer, A., Raveh, I., Lavie, I. & Wagner-Gershgoren, I. (2023). Teachers' Attitudes and Emotions Regarding the Integration of Technology into Teaching. Will be published in *the proceeding of Passion and Professionalism in Teacher Education International conference, The MOFET Institute, Tel Aviv.*
40. (*) Klemer, A., Segal, R., Miedijensky, S., Herscu-Kluska, R., & Kouropatov, A. (2023). Teachers' Attitudes About the Computerized Technology Tools They Incorporate in their Teaching. Will be published in *the proceeding of Passion and Professionalism in Teacher Education International conference, The MOFET Institute, Tel Aviv.*
41. (*) Fellus, O., Segal, R., Shriki, A., Silberman, B. & Movshovitz-Hadar, N. (2023). Grassroots level trends in Mathematics Education in a Time of Crisis. Will be published in *the proceeding of Passion and Professionalism in Teacher Education International conference, The MOFET Institute, Tel Aviv.*
42. (*) Klemer, A., Segal, R., Miedijensky, S., Herscu-Kluska, R., & Kouropatov, A. (2023). Teachers' attitudes towards technology during emergency remote learning. Will be presented in at CERME 13 TWG15 and will published in XXX (Eds.), *Proceedings of the Thirteen Congress of the European Society for Research in Mathematics Education* ,pp XXX, ???? University of Bodaphesht, Hungary
43. (*)Segal, R., Miedijensky, S., Klemer, A., Raveh, I., Lavie, I. & Wagner-Gershgoren, I. (2023). Science and mathematics teachers' attitudes and emotions regarding technology integration. Will be presented in at CERME 13 TWG15 and will published in XXX (Eds.), *Proceedings of the Thirteen Congress of the European Society for Research in Mathematics Education* ,pp XXX, ???? University of Bodaphesht, Hungary
44. (*) Silverman, B., Segal, R., Shriki, A. and Movshovitz-Hadar, N. (2023). Longitudinal impact of Mathematics News Snapshots on high-school students' perceptions of mathematics. Will Presented as *Poster Presentation* and published in M. Ayalon, B. Koichu, R. Leikin, L. Rubel., & M. Tabach (Eds.). *Proceedings of the 46th Conference of the International Group for the Psychology of Mathematics Education*, Vol. 1, pp. 405. Haifa, Israel: PME.
45. (*) Movshovitz-Hadar, N. Segal, R., Shir K., Shriki A., Fell, M. (2023). communicating 21st-century competencies while bridging between contemporary and school mathematics. Will Presented as *Oral Communication* and published in M. Ayalon, B. Koichu, R. Leikin, L. Rubel., & M. Tabach (Eds.). *Proceedings of the 46th Conference of the International Group for the Psychology of Mathematics Education*, Vol. 1, pp. 296. Haifa, Israel: PME.

46. (*) Segal, R. & Biton, Y. (2023). Whatsapp group + Bagrut = Bagroup: Teachers' Perspectives. Will Presented as *Poster Presentation* and published in M. Ayalon, B. Koichu, R. Leikin, L. Rubel., & M. Tabach (Eds.). *Proceedings of the 46th Conference of the International Group for the Psychology of Mathematics Education*, Vol. 1, pp. 403. Haifa, Israel: PME.

Refereed papers published in professional local conference proceedings

1. **Segal, R**. (2014). Characterizing the knowledge and teaching of mathematics teacher educators. *The 15 science conference of research study and creativity*, Oranim Colledge, Kiryat Tivon, Israel. [In Hebrew]
2. **Segal, R**. (2014). Finding a locus with a conserved property through a combination of mathematical tools and dynamic geometric software. Presented at *The Study conference*, Gordon College of Education, Israel. [In Hebrew]
3. Stupel, M., & Segal, R. (2015). Loci with preservation properties using dynamic software. Presented at and published in the proceedings of *the Annual meeting of high school mathematics teachers*, p. 20. Shfayim, Israel, March 30, 2015. [In Hebrew]
4. Movshovitz-Hadar, N., Segal, R., Zigerson, V., & Shriki, A. (2015). Ramzor Project. Presented at and published in the proceedings of *the annual meeting of high school mathematics teachers,* Shfayim, Israel, March 30, 2015. [In Hebrew]
5. Movshovitz-Hadar, N., **Segal, R**., Zigerson, V., & Shriki, A. (2016). Project "Ramzor Latzafon" - actions, insights, and challenges. Presented at, and published in the proceeding of *The 4th Jerusalem Conference on Research in Mathematics Education*, Lev Institute, Israel. [In Hebrew]
6. **Segal, R**.(2016). Teaching math in A level heterogeneous class, how to do it?. *Annual meeting conference of high school mathematics teacher*. Shfayim, Israel. [In Hebrew]
7. **Segal, R**.(2016). Looking Far Towards High Practice - Panel Facilitation. *Annual meeting conference of high school mathematics teacher*. Shfayim, Israel. [In Hebrew]
8. (*) **Segal. R**., Shriki. A., Movshovitz-Hadar. N., Zigerson. V. (2018). "Developing a community of teachers as a lever to empower inexperienced teachers to teach 5 units of mathematics - the case of "Ramzor Latzafon". Presented in *Creativity in Teaching - International conference.* Oranim – Academic College Education.
9. (*) **Segal. R**., Ovadiya. T. (2018). Design geometry tasks integrate technology into a teacher's learning environment. Presented at, and published in the proceeding of *The 6th Jerusalem Conference on Research in Mathematics Education*, p.75. Lev Institute, Israel. [In Hebrew].
10. (*) **Segal. R**., Zigerson. V. (2018). The mentoring model is a lever for the professional development of mathematics teachers at the level of 5 units. Presented at, and published in the proceeding of *The 6th Jerusalem Conference on Research in Mathematics Education*, p. 72. Lev Instetute, Israel. [In Hebrew]. PDF
11. (*) Movshovitz-Hadar, N., Berman, A., Shriki, A., Zigerson, V., **Segal, R**., Silverman, B., & Shir, K. (2018). Math News Snapshots for high school students. A video poster (no. 1), presented at and published in *The 6th Jerusalem Conference on Research in Mathematics Education*. Lev Institute, Jerusalem, 4-5, 2018, p.143. [In Hebrew].
12. (*) Movshovitz-Hadar, N., Shriki, A., Zigerson, V., **Segal, R**., Avisar, T., & Buchnic, N. (2018)."Ramzor" website: an updated database of lesson plans, teaching programs, question items and tests written by mathematics teachers. A video poster (no. 2), presented at and published in *The 6th Jerusalem Conference on Research in Mathematics Education*. Lev Instetute, Israel. [In Hebrew]. Jerusalem, 4-5, 2018, p.141. [In Hebrew].

13. (*) **Segal. R**., Lehavi. Y, Merzel. A., Baram. A., Eylon. B. (2019). Self- video-based discourse as a tool for professional development of mathematics instructors (A Research Report). In E. Hed-Metzuyanim, A. Pinto, & N. Adin (Eds.). *Proceedings of JCRME7 - the 7th Jerusalem Conference on Research in Mathematics Education* (pp. 112-115), Tel Aviv, Israel: The Mofet Institute. (Hebrew).
14. (*) Shriki, A., Silverman, B., **Segal, R**., Shir, K., & Movshovitz-Hadar, N. (2019). On research in mathematics education in Israel - Reflections and appeals (Discussion group). In E. Heyd-Metzuyanim, A. Pinto, & N. Adin (Eds.), *Proceedings of JCRME7 - the 7th Jerusalem Conference on Research in Mathematics Education* (pp. 32–34). Tel Aviv, Israel: The Mofet Institute. (Hebrew).
15. (*) **Segal, R**., Shriki, A., Silverman, B., Movshivitz-Hadar, N. (2020). Integrating mathematical news snapshots in high-school mathematical lessons as a lever for developing mathematical knowledge for teaching. (A Research Report). In Bassan, R., Segal, R. & Haddad, N. (Eds.)). *Proceedings of JCRME8 - the 8th Jerusalem Conference on Research in Mathematics Education* (pp. 179), Tel Aviv, Israel: The Mofet Institute. (Hebrew).
16. (*) Saida, H., **Segal, R**. (2020). Mathematical discourse as a lever for understanding development of the concepts area and perimeter of polygon among fifth grades students. (A Research Report). In Bassan, R., Segal, R. & Haddad, N. (Eds.) .). *Proceedings of JCRME8 - the 8th Jerusalem Conference on Research in Mathematics Education* (pp. 108), Tel Aviv, Israel: The Mofet Institute. (Hebrew).
17. (*) Silverman, B., Movshovitz-Hadar, N., Shriki, A., **Segal, R**. (2020). How does ongoing exposure to mathematical news affect high school students' perceptions of mathematics? (A Research Report). In Bassan, R., Segal, R. & Haddad, N. (Eds.) .). *Proceedings of JCRME8 - the 8th Jerusalem Conference on Research in Mathematics Education* (pp. 183), Tel Aviv, Israel: The Mofet Institute. (Hebrew).
18. (*) Sinitsky, I., Stupel, M., **Segal, R**. (2020). The Contribution of integrating game-based tasks to mathematical and pedagogical Knowledge building of pre-service teachers - the case of buildings with matches. . (A Research for Discussion). In Bassan, R., Segal, R. & Haddad, N. (Eds.) .). *Proceedings of JCRME8 - the 8th Jerusalem Conference on Research in Mathematics Education* (pp. 33), Tel Aviv, Israel: The Mofet Institute. (Hebrew).
19. (*) Ovadiya, T., Krupatov, A., Eldar, O., Lehavi, Y., Nachson, M., Lavi, I, Basan, R., **Segal, R**. & Medijinski, S. (2021) "Designing tasks using technological tools in teaching mathematics and science". *The 21 science conference of research study and creativity*, Oranim Colledge, Kiryat Tivon, Israel. [In Hebrew] https://view.genial.ly/607e8ea49a9ff10ff7af4b4d
20. (*) **Segal, R**., Shriki, A., Silverman, B., Movshivitz-Hadar, N. & Zigerson, V. " (2021). Teachers' perception on the contribution of integrating mathematical news snapshots in teaching to the development of mathematical knowledge for teaching". *The 21 science conference of research study and creativity*, Oranim Colledge, Kiryat Tivon, Israel. [In Hebrew] https://view.genial.ly/607e8ea49a9ff10ff7af4b4d
21. (*) **Segal, R**. (2021). "The Speed the time and the distance of learning and teaching on the social network", presented as (Invited Plenary Lecture). In Silverman, B., Ovadiya, T. & Haddad, N. (Eds.). *Proceedings of JCRME9 - the 9th Jerusalem Conference on Research in Mathematics Education* (p. 10), Tel Aviv, Israel: The Mofet Institute. (Hebrew).
22. (*) **Segal, R**., Levi, Y., Movshovitz-Hadar, N. (2022). "Personalization of mathematics teaching and learning in reinforcement groups. Presented (by Ruti Segal) at and published in the *Proceedings of JCRME10 - the 10th Jerusalem Conference on Research in Mathematics Education*. A-Zoom conference, February 9-10, 2022, pp.137-139 (Hebrew).

23. (*)Biton, Y., Segal, R. (2022). Students' perceptions of learning mathematics in the WhatsApp environment as part of the BaGroup program. Presented (by Ruti Segal) at and published in the *Proceedings of JCRME10 - the 10th Jerusalem Conference on Research in Mathematics Education*. A-Zoom conference, February 9-10, 2022, pp.92-95.
24. (*) Segal, R. (2023). Symposiom Chair on the subject Integrating technology in mathematics and science teaching: aspects of technological pedagogical content knowledge and teachers' emotions. In Lavie, I., Vider, M. & Haddad, N. (Eds.). *Proceedings of JCRME11 - the 11th Jerusalem Conference on Research in Mathematics Education.* Lev Institute, Jerusalem February 15-16, 2023, pp. 214-220.
25. (*) Segal, R., Miedijensky, S., Klemer, A., Raveh, I., Lavie, I. & Wagner-Gershgoren, I. (2023). Science and mathematics teachers' attitudes regarding their TPACK and THEIR emotions. Presented (by Ruti Segal). In Lavie, I., Vider, M. & Haddad, N. (Eds.). *Proceedings of JCRME11 - the 11th Jerusalem Conference on Research in Mathematics Education.* Lev Institute, Jerusalem. February 15-16, 2023, pp. 214-220. (In Hebrew).
26. (*) Klemer, A., Segal, R., Miedijensky, S., Herscu-Kluska, R., & Kouropatov, A. (2023). Mathematics and Science Teachers' attitudes towards the integration of computerized technology before and during the outbreak of the Corona virus. Presented by Anatoli Kouropatov. In Lavie, I., Vider, M. & Haddad, N. (Eds.). *Proceedings of JCRME11 - the 11th Jerusalem Conference on Research in Mathematics Education.* Lev Institute, Jerusalem, February 15-16, 2023, pp. 214-220. (In Hebrew).
27. (*) Movshovitz-Hadar, N., Eisenberg, E., Fell, M., Segal, R., Shir, K., Shriki, A.: A discussion group about integrating the 21st century competencies in mathematics education. Abstract published in the proceedings of the 11th Jerusalem Conference on Research in Mathematics Education. In Lavie, I., Vider, M. & Haddad, N. (Eds.). *Proceedings of JCRME11 - the 11th Jerusalem Conference on Research in Mathematics Education.* Lev Institute, Jerusalem, February 15-16, 2023, pp. 198-201. (In Hebrew).

E. Other Scientific Publications

Published

Professional reports

1. Movshovitz-Hadar, N., Shriki, A., **Segal, R**., & Zigerson, V. (2017) Project "Ramzor to the north" activity summary report years 2014-2017. Samuel Neamann Institute for National Policy Studies Technion - Israel Institute of Technology, Haifa, Israel. [in Hebrew] https://www.neaman.org.il/Ramzor-to-the-North-publication
2. (*) **Segal Ruti** , Shriki Atara , Movshovitz-Hadar Nitsa. (2020). Technology environment that accelerates sharing and professional development for mathematics teachers the case of RAMZOR: Samuel Neaman Institute, for National Policy Studies Technion - Israel Institute of Technology, Haifa, Israel 2020. https://www.neaman.org.il/EN/Technology-environment-that-accelerates-sharing-and-professional-development-for-mathematics-teachers-The-case-of-RAMZOR.

F. Other Publications

2014 A report summarizing an invited professional study tour of 5 schools in London for excellent mathematics and physics teachers. Invited by Trump Foundation, Israel, [in Hebrew]

2005 As part of participating in an advanced course on "mathematical risk financing process" in the Mathematics Department at the Technion, my work has been selected by the lecturer Prof. Abraham Zaks to be published in the Israeli economic newspaper "Globes" [in Hebrew]

G. Other Works Connected with my Scholarly Field

2013-2021	Teaching mathematics coursess at Sha'anan College of Education
2013-2020	Pedagogic instructor in the practical training of pre-service mathematics teachers
2018	Member of the development team of a MOOC – Massive Open Online Course, on the subject of Geometric Auxiliary Construction for college students In collaboration with Dr. Biton, Y., Dr. Kouropatov, A., Dr. Harel, R.). As part of the joint management of the Center for Educational Technology, Levinsky-Academic College of Education, and Sha'anan- Academic religious College of education.
2019	Member of a team developed a book on function for a 9th grade, *The Center for Educational Technology*, Israel [In Hebrwe]
2019	Member of the team developed a book on geometry for a 9th grade. *The Center for Educational Technology*, Israel [In Hebrwe]
2021-2022	Member of the development team of a MOOC – Massive Open Online Course, on the subject of The Wonders of Mathematics. Mathematics course for the general public, for college students. In collaboration with Prof, Nitza Movshovitz-Hadar and Dr. Yaniv Biton. As part of the joint management of the Center for Educational Technology, Technion, and Sha'anan- Academic religious College of education. (forthcoming in September 2022).
Oct. 2022	Participating in Pre-CERME13 TWG15 online Seminars.
2021-2023	Member of the steering committee for the Hagar Kolman scholarship, for the Bedouin sector. Oranim College of Education and Society.
2022- 2023	Member of the team authors writing Calculuse book for high school students learning 4 unit level, Yavneh Publishing Ltd.
2022-2023	Member of the team authors engaged in writing teacher's guide for teaching Calculuse high school students learning 4 unit level, Yavneh Publishing Ltd.