

**Name: Naftaliev Elena**

## **CURRICULUM VITAE**

### **1. Personal Details**

Home Address: Bar Kochva St. 113/7, Herzliya, 4600719, Israel

Home Telephone Number: +972-9-9797330

Cellular Phone: +972-54-6654146

Electronic Address: elenanaftaliev@gmail.com

### **2. Higher Education**

#### **A. Undergraduate and Graduate Studies**

<b>Period of Study</b>	<b>Name of Institution and Department</b>	<b>Degree</b>
1982-1987	Faculty of Mathematics, Dagestan State University, Russia	MSc with distinction Thesis: Approximation of Convex Functions by Rational Fractions
2006-2012	Faculty of Education, University of Haifa, Haifa, Israel	PhD Thesis: Interactive Diagrams: Mathematical Engagements with Interactive Text

#### **B. Post-Doctoral Studies**

<b>Period of Study</b>	<b>Name of Institution, Department and Host</b>
2013-2015	The Center of Research Excellence (I-CORE) "Learning in a Networked Society (LINKS): Co-Creation of Knowledge in Technology-Enhanced Communities of Learning, University of Haifa, Israel  With Prof. Yerushalmy Michal and in collaboration with Prof. Daniel Chazan, The Center for Mathematics Education, University of Maryland, USA (2013-2014)

### **3. Academic Ranks and Tenure in Institutes of Higher Education**

<b>Dates</b>	<b>Name of Institution and Department</b>	<b>Rank/Position</b>
2000-2002	Management and Economics Department, Open University, Israel	Lecturer
2005-2006	The Institute for the Research of Alternatives in Education, University of Haifa	Researcher

2009 – 2010, 2013 – 2015	Faculty of Education, University of Haifa	Teaching Fellow
2012 – Present	Levinsky College of Education, Tel Aviv	Teacher
2012 – 2014	Achva College	Instructor (Dr.)
2014 – Present	Achva College	Lecturer

#### 4. **Offices in Academic Administration**

2015 –2019 Head, program “Alpha” – Clinic preparation of math teachers for high school mathematics.

2020- Member, Committee for Technology and Pedagogy

#### 5. **Scholarly Positions and Activities**

##### a. **Reviewer**

2012 – Present Educational Studies in Mathematics

2013 – 2016 The Journal for Research in Mathematical Education (Hebrew)

2014 – Present Journal for Research in Mathematics Education

2020- Present The Journal of Mathematical Behavior

2020- Present International Journal of Mathematical Education in Science and Technology

##### b. **Membership in Professional Societies**

2007 IADIS – International Association for Development of the Information Society

2009, 2016 International Group for the Psychology of Mathematics Education  
2018

\*2015- The International Community of Teachers of Mathematical Modelling and Applications

##### c. **Member of Mathematical Competitions Committees**

\*2016- National representative of the International Mathematical Modeling Challenge , <http://immchallenge.org/Index.html>

#### 6. **Participation in Scholarly Conferences**

##### a. **Active Participation**

### International Conferences

<b>Date</b>	<b>Conference</b>	<b>Place of Conference</b>	<b>Subject of Lecture/Discussion</b>	<b>Role</b>
12.2007	Cognition & Exploratory Learning in Digital Age	Algrave, Portugal	Learning Mathematics with Interactive Diagrams	
07.2009	The 33 <sup>rd</sup> Annual Conference of the International Group for the Psychology of Mathematics	Thessaloniki , Greece	Interactive Diagrams: Alternative Practices for the Design of Algebra Inquiry	Chair of session
07.2012	The 12 <sup>th</sup> International Congress on Mathematical Education (ICME-12)	Seoul, Korea,	Interactive Diagrams: Mathematical Engagements with Interactive Textbooks	
<b>04.2014</b>	<b>Seminar, Center for Mathematics Education</b>	<b>Maryland University, USA</b>	<b>Interactive Diagrams: Mathematical Engagements with Interactive Text</b>	
06.2015	The 12 <sup>th</sup> International Conference on Technology in Mathematics	Faro, Portugal	Guiding Student Instruction with an Interactive Diagram: The Case of Equations.	

	Teaching (ICTMT 12)			
*07.2015	The 17 <sup>th</sup> International Conference on the Teaching of Mathematical Modelling and Applications.	Nottingham, UK	Interactive Diagrams Used for Collaborative Learning Concerning Math Models of Motion.	
*06.2016	The 3 <sup>rd</sup> Manchester Conference on Mathematics Education and Contemporary Theory (MECT 3).	Manchester, UK	Semiotic Framework for Pedagogical Design of Interactive Texts.	
<b>*07.2016</b>	<b>The 13<sup>th</sup> International Congress on Mathematics Education (ICME-13)</b>	<b>Hamburg, Germany</b>	<b>Engagements of Prospective Teachers with E-textbook</b>	<b>Invited lecture at Topic Study Group on Research on Resources</b>
*05.2017	The 2 <sup>d</sup> International Conference on Mathematics Textbook Research and Development	Rio de Janeiro, Brazil	Pedagogical Functions of Interactive Texts	
*07.2017	The 18 <sup>th</sup> International Conference on the	Cape Town, South Africa	Student Engagement with Interactive Modeling	Chair of session

	Teaching of Mathematical Modelling and Applications.		Activities Presented by Interactive Texts	
*05.2018	The Re(s)ources Conference	Lyon, France	Prospective Teachers' Interactions with Interactive Diagrams: Semiotic Tools, Challenges and New Paths	
<b>*11.2018</b>	<b>The 5<sup>th</sup> International Conference "Trends in Research-Based Mathematics Education"</b>	<b>Puebla, Mexico</b>	<b>Interactive Curriculum Materials: Challenges and New Avenues for the Construction of Mathematical Meaning</b>	<b>Keynote speaker</b>
*06.2019	The 7th International Conference on Teacher Education - The Story of Innovation in Teacher Education	Tel Aviv, Israel	Prospective Teachers' Interactions with Interactive Materials: Semiotic Tools, Challenges and New Avenues	
*07.2019	The 19 <sup>th</sup> International Conference on the Teaching of Mathematical Modelling and Applications	Hong Kong	Video Clip and Animation of Motion as a Context for Active Modelling Performance	Chair of session

*07.2019	The 19 <sup>th</sup> International Conference on the Teaching of Mathematical Modelling and Applications	Hong Kong	Ethno-Modelling in the Bilingual Jewish –Arab School in Israel	
*09.2020	The 2 <sup>d</sup> Conference for Mathematics Education in the Digital Age (MEDA)	Linz, Austria	The Social Development of Knowledge in a New Pedagogical Setting: The Same Activity Presented as Three Different Interactive Diagrams	

### **National Conferences**

1998	The 5 <sup>th</sup> Annual Conference for Mathematical Education in Israel	Learning Mathematics with Technology in a Heterogeneous Classroom.	
2000	The 7 <sup>th</sup> Annual Conference for Mathematical Education In Israel	Learning Mathematics with Technology: How is the Teaching Method Reflected in the Results of the State Test?	
2002	The 9 <sup>th</sup> Annual Conference for Mathematical Education in Israel	Solving Word Problems	
2003	The 10 <sup>th</sup> Annual Conference for Mathematical Education in Israel	Do the Commutative Property also Takes Place when Multiply Functions: The Case of Distance Learning in Subject of Functions?	
2003	The 18 <sup>th</sup> Annual Conference on Technology in Education	Interactive Textbook: Functions	
2004	The 11 <sup>th</sup> Annual Conference for Mathematical Education in Israel	Multiple-Roots Equations	
2004	The 19 <sup>th</sup> Annual Conference on Technology in Education	Motion Model: Move On!	

2005	The 20 <sup>th</sup> Annual Meeting of Technology in Education	The Development of Mathematical Literacy as a Motto for Teaching and Learning in a Technology Environment	
2007	The Annual Conference for Mathematical Education in High School in Israel	"Negative and Positive Numbers" – Reflections on the Teaching Components	
2006	Summer School: "Inquiry Based Teaching-Learning of Mathematics". Department of Technology and Science Teaching, Technion, Haifa.	Students Learn Algebra in the Environment: "Visual Math: Functions"	
2008	The VIII Seminar for Doctoral Students in Science, Mathematics and Technology, Nir Etzion.	Analysis of Interactive Diagrams Modifications as a Part of the Problem-Solving Process in Mathematics	
2009	"Thinking Math"-The Seminar of Department of Mathematical Education, Faculty of Education, University of Haifa.	Interactive Diagrams: An Alternative Way to Design an Inquiry in Algebra	
<b>2011</b>	<b>Learning Forum, the Center for Educational Technology</b>	<b>Learning with Interactive Textbooks- from Research to Practice. Thinking about a Possible Implementation of the Semiotic Framework for Design Textbooks in Different Content Fields</b>	<b>Invited lecture</b>
2011	The Mathematics Department Seminar, the Center for Educational Technology	The Build-A-Book Geometry Class	
<b>2012</b>	<b>The Mathematics Department Seminar, Levinsky College</b>	<b>The Meanings of Mathematical Engagement with Interactive Textbooks</b>	<b>Invited lecture</b>
<b>2012</b>	<b>The languages Department Seminar, the Center for Educational Technology</b>	<b>Meanings of Engagement with Interactive Text. A Discussion about the Research and Application for the Design of Language Textbooks.</b>	<b>Invited lecture</b>
<b>2012</b>	<b>Seminar: "Teaching Mathematics with Digital Curriculum Materials -A View from Academy, from Training of Teachers and from Schools, Mofet Institute</b>	<b>Interactive diagrams: Meanings of Mathematical Engagement with E-text</b>	<b>Invited lecture</b>

2012	The National Conference of Mathematical Education in the Elementary School: "21 <sup>st</sup> Century Skills in Learning and Teaching of Mathematics in the Elementary School".	Digital Textbooks: New Possibilities for Teaching and Learning	
2012	Doctoral Students Conference, Faculty of Education, University of Haifa	Interactive diagrams: Meanings of Mathematical Engagement with Electronic Text	
2012	A Conference of PhD Graduates in Teaching of Mathematics, Technology and Science, Technion	Interactive diagrams: Meanings of Mathematical Engagement with E-text	
2015*	Learning in a NetworKed Society (LINKS): Co-Creation of Knowledge in Technology-Enhanced Communities of Learning, 3rd Annual Retreat. Beer Sheba, Israel.	Mathematical Text Design: The Semiotics and Pedagogies of Interactive Diagrams.	
2016*	The 4 <sup>th</sup> Jerusalem Conference on Research in Mathematics Education (JCRME)	Semiotic Aspects in Research on Design of Interactive Learning-Teaching Materials	Chair of Symposium
2017*	Conference of Pedagogical Instructors, Achva Academic College	Interactive Comics as a Tool for Creating and Analyzing Teaching Scenarios	
2017*	<b>The 5<sup>th</sup> Jerusalem Conference on Research in Mathematics Education (JCRME)</b>	<b>Mathematics, Pedagogy, Technology</b>	<b>Plenary lecture</b>
2018*	The 6 <sup>th</sup> Jerusalem Conference on Research in Mathematics Education (JCRME)	Constructing an Invented Concept ("Definition" and "Image" of a Concept) by Students and the Prototype Phenomenon	
2020*	The Annual virtual Meeting of the Israel Mathematical Union (IMU 2020)	Experimental Mathematics at School – a Three-Faced Coin: Mathematical, Didactic and Research Aspects.	

### **b. Organization of Conferences or Sessions**

<b>Date</b>	<b>Name of Conference</b>	<b>Place of Conference</b>	<b>Subject of Conference/ Role at Conference/ Comments</b>	<b>Role</b>
*2015	The 3 <sup>rd</sup> Jerusalem Conference on Research in Mathematics Education (JCRME)	Jerusalem	Research in Mathematics Education	Member of Program Committee
*2016	The 4 <sup>th</sup> Jerusalem Conference on Research in Mathematics Education (JCRME)	Jerusalem	Symposium: Semiotic Aspects in Research about Teaching-Learning with Interactive Curriculum Materials	Chair of Symposium
*2016	The 4 <sup>th</sup> Jerusalem Conference on Research in Mathematics Education (JCRME)	Jerusalem	Research in Mathematics Education	Chair of Conference
*2017	From Mathematics Teaching to High-Tech and Back	Achva Academic College	Mathematics Teaching and High-Tech Industry	Member of Program Committee

### **7. Invited Lectures\ Colloquium Talks**

<b>Date</b>	<b>Place of Lecture</b>	<b>Name of Forum</b>	<b>Presentation/Comments</b>
2011	The Center for Educational Technology, Tel-Aviv	Learning Forum	Learning with Interactive Textbooks-From Research to Practice. Thinking about a Possible Implementation of the Semiotic Framework for Design Textbooks in Different Content Fields
2012	Levinsky College, Tel-Aviv	The Mathematics Department Seminar	The Meanings of Mathematical Engagement with Interactive Textbooks
2012	The Center for Educational	The Languages Department Seminar	Meanings of Engagement with Interactive Text. A Discussion about the Research and Application for

	Technology, Tel-Aviv		the Design of Language Textbooks.
2012	Mofet Institute, Tel-Aviv	The Seminar: "Teaching Mathematics with Digital Curriculum Materials -A View from Academy, from Training of Teachers and from Schools"	Interactive Diagrams: Meanings of Mathematical Engagement with E-text
2014	Maryland University, USA	Seminar, Center for Mathematics Education	Interactive Diagrams: Mathematical Engagements with Interactive Text
*2016	Hamburg, Germany	The 13th International Congress on Mathematics Education (ICME-13), Topic Study Group on Research on Resources	Engagements of Prospective Teachers with E-textbook
*2017	Jerusalem, Israel	The 5th Jerusalem Conference on Research in Mathematics Education (JCRME)	Mathematic, Technology, Pedagogy
*2018	Puebla, Mexico	The 5 <sup>th</sup> International Conference "Trends in Research-Based Mathematics Education <a href="https://www.fcfm.buap.mx/T/EMBI/talleres.php">https://www.fcfm.buap.mx/T/EMBI/talleres.php</a>	Interactive Curriculum Materials: Challenges and New Avenues for the Construction of Mathematical Meaning

## 8. Research Grants

### a. Grants Awarded

<b>Role in Research</b>	<b>Co-Researchers</b>	<b>Topic</b>	<b>Funded by</b>	<b>Year</b>
Researcher	Prof. Yerushalmy, PI	Exploring Interactive Diagrams-Based Problem Solving Within Mathematics Web Environments	ISF (grant No. 236/05)  (73,599 USD)	2005-2009
*Founder and Director	Dr. Guberman and Dr. Barabash	Project for Clinic Preparation of Math Teachers for High School Mathematics.	The Trump Foundation  (1,700,000 NIS)	2015-2019
*PI	Prof. Barabash	Experimental Mathematics at School:	ISF	2019-2023

		Leading Teachers Towards a Change	(840,000 NIS)	
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**b. Submission of Research Proposals – Not Funded**

<b>Role in Research</b>	<b>Co-Researchers</b>	<b>Topic</b>	<b>Funded by</b>	<b>Year</b>	<b>Score</b>
*PI	Prof. Barabash	Interactive Tools in Mathematics Teaching: From a Transitory Episode to Educated Usage Inherent to the Teachers' Classroom Practice	Chief Scientist's Office, Ministry of Education	2016	The Proposal Passed to the Final Round of the Competition

**8. Scholarships, Awards and Prizes**

<b>Role</b>	<b>Topic</b>	<b>Funded by</b>	<b>Grants_Year</b>
Postdoctoral Fellow	Design Principles and Functions of Interactive Text in Math E-Textbooks	I-CORE Program of the Planning and Budgeting Committee and The Israel Science Foundation (1716/12)  (186,000 NIS)	2013-2015
Developer (Developed with Dr. Guberman)	Course in Arithmetic for First Year Students	Achva Academic College  (2000 NIS)	2014-2015
*Excellent Lecturer Award		Achva Academic Colledge (15% of the annual salary)	2016-2017
*Excellent Lecturer Award		Achva Academic Colledge (20% of the annual salary)	2018-2019

**9. Teaching**

**a. Courses Taught in Recent Years**

<b>Year</b>	<b>Name of Course</b>	<b>Type of Course</b>	<b>Degree</b>

2012 – Present	Technology in Mathematics Education	Seminar	Graduate
2012-2016	Theory and Practice in Mathematics education	Seminar	Undergraduate
2012-2018	Methods of Assessment, Summative Assessment	Workshop	Undergraduate
2012-2018	Teaching and Learning of Mathematics	Workshop	Undergraduate
2012-2018	Geometry	Workshop	Undergraduate
2012 – Present	Foundations of Mathematics	Workshop	Undergraduate
2015 – Present	Integrative Course-Algebra and Calculus	Course	Teaching certificate
2016 – Present	Writing of Final Project	Workshop	Graduate
2016 – Present	Research Methods	Course / Workshop	Graduate
2019- Present	Number Theory	Course	Undergraduate

b. **Supervision of Graduate Students**

<b>Name of Student</b>	<b>Title of Thesis</b>	<b>Degree</b>	<b>Date of Completion / in Progress</b>	<b>Students' Achievements</b>
*Eitan Schneider	The Role of Interactive tool "Broken Calculator" in	M.Ed	2018	95

	Developing Number Sense			
*Rula Gharra	Ethnomathematics in the Bilingual Jewish-Arab School in Israel	M.Ed	2018	92
*Hadar Cohen	Elementary Students' Beliefs about Mathematics	M.Ed	2018	70
*Sherry Dahan	The Development of Early Algebra Thinking of Elementary Students with Interactive Tools	M.Ed	2020	88
*Efrat Adar	Solving Equations with Models in Elementary School	M.Ed	2020	90
*Mor Perez Dahan	Teachers' Mathematical Knowledge and Students' Mathematical Language	M.Ed	2020	90
*Tanya Shaulov	Using Cooking Activities to Develop Elementary Students' Understanding of Ratio	M.Ed	2020	75

### **10. Professional Experience**

1987-1993 Mathematics Teacher, Grades 7-12, Dagestan State University High School, Russia.

1994-2005 Mathematics Teacher, Grades 7-9, Rashish, Petach Tikva (Prize Ministry of Education for using innovative technologies in teaching), Israel.

1996 – 2012 Member of the Math Team, CET - Center of Educational Technology:

- Teaching In-Service courses and workshops for mathematics teachers, focusing on engaging computer programs in high school mathematics teaching.
- Member of the development team of high school computed learning environments for mathematics.
- Member of the development team of middle school textbooks for mathematics.

2004 –2005 Member of the development team of METZAV TEST (Indicators of school efficiency and growth, a national test) for 8th grade in Mathematics.

## **PUBLICATIONS**

### **Published**

#### **A. Articles in Refereed Journals**

1. Naftaliev, E., & Yerushalmy, M. (2011). Solving algebra problems with interactive diagrams: Demonstration and construction of examples. *Journal of Mathematical Behaviour*, 30(1), 48-61. Q1
2. Yerushalmy, M., & Naftaliev, E. (2011). Design of Interactive Diagrams Structured Upon Generic Animations. *Technology, Knowledge and Learning*, 16(3), 221-245. DOI: 10.1007/s10758-011-9183-0. Q1
3. Naftaliev, E., & Yerushalmy, M. (2013). Guiding Explorations: Design Principles and Functions of Interactive Diagrams. *Computers in the Schools*, 30(1-2), 61-75. <http://dx.doi.org/10.1080/07380569.2013.769084> .Q2
4. \*Swidan, O. & Naftaliev, E. (2019). The Role of the Design of Interactive Diagrams in Teaching–Learning the Indefinite Integral Concept, *International Journal of Mathematical Education in Science and Technology*. DOI: [10.1080/0020739X.2018.1522674](https://doi.org/10.1080/0020739X.2018.1522674). Q2
5. \*Ayalon, M., Naftaliev, E., Levenson, E. S., & Levy, S. (2020). Prospective and In-Service Mathematics Teachers' Attention to a Rich Mathematics Task While Planning its Implementation in the Classroom. *International Journal of Science and Mathematics Education*. DOI: <https://doi.org/10.1007/s10763-020-10134-1> Q1

## **B. Edited Peer Reviewed Book**

6. \*Naftaliev, E., & Adin, N. (2016). *The Proceedings of the 4th Jerusalem Conference on Research in Mathematics Education*. Mofet. (117 pages, Hebrew)  
<http://www.mofet.macam.ac.il/amitim/iun/JCRME4/Documents/JCRME4-FullText.pdf>

## **C. Chapters in Peer Reviewed Books**

7. \*Naftaliev, E., & Yerushalmy, M. (2017). Design digital tasks: Interactive Diagrams as resource and constraint. In Leung, A. & Baccaglini-Frank, A. (Eds), *The Role and Potential of using Digital Technologies in Designing Mathematics Education Tasks*, 153-173. Springer.
8. \*Naftaliev, E., (2017). Interactive Diagrams Used for Collaborative Learning Concerning Mathematical Models of Motion. In Stillman, G., Blum, W. & Kaiser, G. (Eds), *Mathematical Modelling and Applications: Crossing and Researching Boundaries in Mathematics Education*. 553-563. Springer.
9. \*Naftaliev, E., (2018). Prospective Teachers' Interactions with Interactive Diagrams: Semiotic Tools, Challenges and Well-Trodden Paths. In Fan, L., Trouche, L., Qi, C., Rezat, S. & Visnovska, J. (Eds), *Research on Mathematics Textbooks and Teachers' Resources: Advances and Issues*, 297-314. Springer.
10. \*Drijvers, P., Gitirana, V., Monaghan, J., Okumus, S., Besnier, S., Pfeiffer, C., Mercat, C., Thomas, A., Christo, D., Bellemain, F., Faggiano, E., Orozco-Santiago, J., Ndlovu, M., Van Dijke-Droogers, M., Ignácio, R., Swidan, O., Filho, P., Albuquerque, R., Hadjerrouit, S., Ülger, T., Fidje, A., Cunha, E., Araque, F., Nongni, G., Iglori, S., Naftaliev, E., Psycharis, G., Carton, T., Skott, C., Gaona, J., Lucena, R., Júnior, J., Tibúrcio, R. & Rodrigues, A. (2019). Transitions Toward Digital Resources: Change, Invariance, and Orchestration. In Trouche L., Gueudet G., Pepin B. (Eds), *The 'Resource' Approach to Mathematics Education. Advances in Mathematics Education*. 389-444. Springer, Cham.

## **D. Articles in Peer-Reviewed Conference Proceedings**

1. Yerushalmy, M. & Naftaliev, E. (2007). Learning Mathematics with Interactive Diagrams. *In the Proceedings for "Cognition & Exploratory Learning in Digital Age" (CELDA)*, 123-130, Algrave, Portugal.
2. Naftaliev, E. & Yerushalmy, M. (2009). Interactive Diagrams: Alternative Practices for the Design of Algebra Inquiry. *In the Proceedings of the 33rd Annual Conference of the International Group for the Psychology of Mathematics Education*, 185-192. Thessaloniki, Greece.
3. Naftaliev, E. & Yerushalmy, M. (2012). Interactive Diagrams: Mathematical Engagements with Interactive Textbooks. *In the Proceedings of the 12th International Congress on Mathematical Education (ICME-12)*, Seoul, Korea.  
<http://www.icme12.org/upload/UpFile2/TSG/1286.pdf>
4. Naftaliev, E. & Yerushalmy, M. (2012). Interactive Diagrams: Mathematical Engagements with Interactive Textbooks. *In the Proceedings of the International Colloquium "The Didactics of Mathematics: Approaches and Issues". A Hommage to Michèle Artigue*. France, Paris.
5. Yerushalmy, M. & Naftaliev, E. (Plenary) (2013). E-Textbook for Mathematical Inquiry: Design of Engagements & Boundaries. ICMI Study 22: Task Design. University of Oxford, UK.  
<http://www.mathunion.org/icmi/digital-library/icmi-study-conferences/icmi-study-22-conference/>
6. \*Naftaliev, E., & Yerushalmy, M. (2015). Guiding Student Instruction with an Interactive Diagram: the Case of Equations. *In the Proceedings of the 12th International Conference on Technology in Mathematics Teaching – ICTMT 12, Faro, Portugal*.
7. \*Naftaliev, E. (2015). Interactive Diagrams used for collaborative learning concerning math models of motion. *The 17th International Conference on the Teaching of Mathematical Modelling and Applications*. Nottingham, UK.
8. \*Naftaliev, E., (2016). Engagements of Prospective Teachers with E-textbook. Invited paper to be included in TSG-38 (Topic Study Group on Research on

resources (textbooks, learning materials etc.)). *The 13th International Congress on Mathematical Education (ICME-13)*, Hamburg, Germany.

9. \*Naftaliev, E., Swidan, O., & Yerushalmy, M. (2016). Semiotic framework for research about design of interactive curriculum materials in math. *In the Proceedings of the 4th Jerusalem Conference on Research in Mathematics Education*. (Hebrew)
10. \*Naftaliev, E., (2017). Mathematic, technology, pedagogy. *In the Proceedings of the 5th Jerusalem Conference on Research in Mathematics Education*. Jerusalem, Israel (Hebrew).
11. \*Naftaliev, E., (2017). Pedagogical functions of interactive texts. *In Proceedings of the 2d International Conference on Mathematics Textbook Research and Development (ICMT)*, Rio de Janeiro, Brasil.
12. \*Naftaliev, E., (2017). Student engagement with interactive modeling activities presented by interactive texts. *In the Proceedings of the 18th International Conference on the Teaching of Mathematical Modelling and Applications*.
13. \*Naftaliev, E., (2017). Interactive diagrams used for collaborative learning. *In the [Proceedings of the 13th International Conference on Technology in Mathematics Teaching](#)*, 32-39. Lyon, France.
14. \*Naftaliev, E., & Hershkovitz, R. (2018). Do Self-Invention of Geometrical Concepts is Prototypes free? *In the Proceedings of the 6th Jerusalem Conference on Research in Mathematics Education*. Jerusalem, Israel (Hebrew).
15. \*Naftaliev, E. (2018). Prospective teachers' interactions with interactive diagrams: semiotic tools, challenges and new paths. *[In the Proceedings of the Re\(s\)ources Conference](#)*, 304-308. Lyon, France.
16. \*Naftaliev, E., (2019). Video Clip and Animation of Motion as a Context for Active Modelling Performance. *In the Proceedings of the 19th International Conference on the Teaching of Mathematical Modelling and Applications, Hong Kong*.

17. \*Naftaliev, E., & Garra, R. (2019). Ethno-Modelling in the Bilingual Jewish–Arab School in Israel. *In the Proceedings of the 19th International Conference on the Teaching of Mathematical Modelling and Applications, Hong Kong.*
18. \*Naftaliev, E., (2020). The Social Development of Knowledge in a New Pedagogical Setting: The Same Activity Presented as Three Different Interactive Diagrams. *In the Proceedings of the 2d Conference for Mathematics Education in the Digital Age (MEDA), 475-483. Linz, Austria.*

### **E. Other Scientific Publications**

#### **Scientific Reports**

1. *Analyzing Effects of Animations and Multi-Representations Tools: Learning the Mathematics of Motion with Interactive Diagrams.* (With Yerushalmy, M.). Report for ISF Grant 236/05. 2007.
2. *Multiple representation, technology and Interactive Diagrams (IDs) in the Context of Algebra.* (With Yerushalmy, M.). Final report for ISF Grant 236/05. 2009.

### **F. Other Works Connected to my Scholarly Field**

#### **Textbooks and Learning Materials in Hebrew**

3. *Visualizing Mathematics*, series of booklets for student and teacher guides. CET, (1995-2002), (Member of the development team)
4. *Calculus Database: an interactive inquiry-based activity on the web.* CET, (2005-2006). (Member of the development team)
5. *Shvilim*, series of nine interactive mathematics textbooks for student and teacher guides. CET, (2004-2012). (Member of the development team)
6. *Mathematics for middle school*, series of five interactive mathematics textbooks for student and teacher guides. CET, (2013-2014). (Member of the development team), <http://www.school.kotar.co.il/KotarApp/Viewer.aspx?nBookID=100983257#1.7955.6.default>

### **G. Submitted Publications**

7. \*Naftaliev, E. & Hershkowitz, R. (Submitted). "Build a concept" – The concept's critical attributes as mediators between the concept's definition and the concept's image of a new invented concept.