

July 2021

Curriculum Vitae

1. Personal Data

Name in Hebrew:	ד"ר קלмер ענת
Name in English:	Klemer Anat, Ph.D.
Department/School:	Education
E-Mail:	AnatKl@wgalil.ac.il

2. Education Certificates and Degrees

<u>Education</u>	<u>Institute</u>	<u>Department</u>	<u>Year</u>
First Degree	Bar Ilan University	Psychology and criminology	1988
Second Degree	Haifa University	Mathematics Education	1992
Third Degree	Haifa University	Mathematics Education	2000

3. Title of Doctoral Thesis: Models to improve the understanding of the concepts of ratio and proportion-colors, chips and correspondence tables.

Supervisors: Prof. Perla Nesher and Dr. Irit Peled.

4. Academic Ranks (Last 5 years)

<u>Rank</u>	<u>% Position</u>	<u>From</u>	<u>Institute</u>
Lecturer Rank given 1.2.15	100%	2012 -Present	Western Galilee College
Teacher Instructor	50%	2014 -Present	Oranim Academic College of Education

5. Scientific Areas of Specialization

Construction of knowledge and understanding of math concepts, as well as dealing with Problem Solving while modeling situations with ICT tools and physical manipulatives.

Development of computerized materials for teaching, learning and assessing learning in Mathematics for k-6.

6. **Academic Profile**

The focus of my work is in developing concrete-based teaching and learning tools that emerge from the psychology of learning, in order to establish mathematical insights among children. I work mainly with teachers and with students of education. I combine both research and practice in my work. The motivation of my work stems from the study of the psychological aspects of teaching and learning in the area of mathematics. My goal is to help children, to help themselves.

7. **Recent Publications**

Klemer, A., & Peled, I. (1998). Inflexibility in teacher's ratio conceptions. Proceedings of the 22nd Conference of the International Group for the *Psychology of Mathematics Education*, 3, 128-134.

Alin, R., & Klemer, A. (2002). Integrating the use of spreadsheet with mathematical problem solving. *Strong Number 2000 (Mispar Hazak 2000)*, 3, 30-35. (Hebrew).

Oberman, J., Klemer, A., & Karol, S. (2003). The study of the fraction in an online environment. *Strong Number 2000 (Mispar Hazak 2000)*, 6, 30-34. (Hebrew).

Golan, M., Klemer, A., & Oberman, J. (2014). Origametria: Developing and Fostering Geometric Thinking: A Qualitative Research Program for Teaching Quadrilaterals using Origametria. Origami6: 6th International Meeting on Origami in Science, *Mathematics and Education*. Tokyo, Japan.

Klemer, A., Oberman, J., & Golan, M. (2015). Development of spatial insight - Learning and teaching of geometry through paper folding (origami). *Strong Number 2000 (Mispar Hazak 2000)*, 26. (Hebrew).

Klemer, A., Tal, I. (2017). Understanding the calculation of a triangular area: Three types of activities learning in combination with physical and computerized objects to construct geometrical insight. (7 pages). (Hebrew).

Klemer, A. Rapoport, S., & Lev, Z. H. (2018). The missing link in teachers' knowledge about common fractions division. International Journal of mathematical education in science and technology. Taylor & Francis.

Peled, I. & Klemer, A. (2018). Teachers' Knowledge and Flexibility: Understanding the Roles of Didactical Models and Word Problems in Teaching Integer Operations. In L. Bofferding, & N. M. Wessman-Enzinger (Eds). Exploring the integer Addition and Subtraction Landscape–Perspectives on Integer Thinking. Springer.
<https://link.springer.com/book/10.1007/978-3-319-90692-8>

- Klemer, A. & Tal, I. (2019). The accessibility of a research problem using geogra. Strong number 2000 (Mispar Hazak 2000), 28, 54-61. (7 pages). (Hebrew).
- Klemer, A. & Lev, Z. H. (2019). Children explain the distribution of fractions using representations in Excel. Research and Study in Mathematics Education, No. 7. (16 pages). (Hebrew).
- Klemer, A. Rapoport, S., & Lev, Z. H. (2019). Building a Computerised Dynamic Representation as an Instrument for Mathematical Explanation of Division of Fractions. International Journal of mathematical education in science and technology. Taylor & Francis. (18 pages).
- Klemer, A. Rapoport, S., & Keisar, E. (2019). Development of Math Trainee Teachers' Knowledge while Creating a MOOC. International Journal of mathematical education in science and technology. Volume 51 Issue 6, Pages: 939-953. Taylor & Francis. (14 pages).
- Klemer, A. Rapoport, S. (2020). Origami and GeoGebra activities contribute to geometric thinking in second graders. Eurasia Journal of Mathematics, Science and Technology Education. Volume 16 Issue 11. (27 pages).
- Klemer, A. Keisar, E. (2021). Changes in Math students' knowledge while creating a MOOC course on ratio and proportion. *Research and Study in Mathematics Education*, No. 8. (11 pages). (Hebrew).