

Let's go for a TRAIL

Teacher-Researcher
Alliance for Investigating Learning

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Lost in translation...

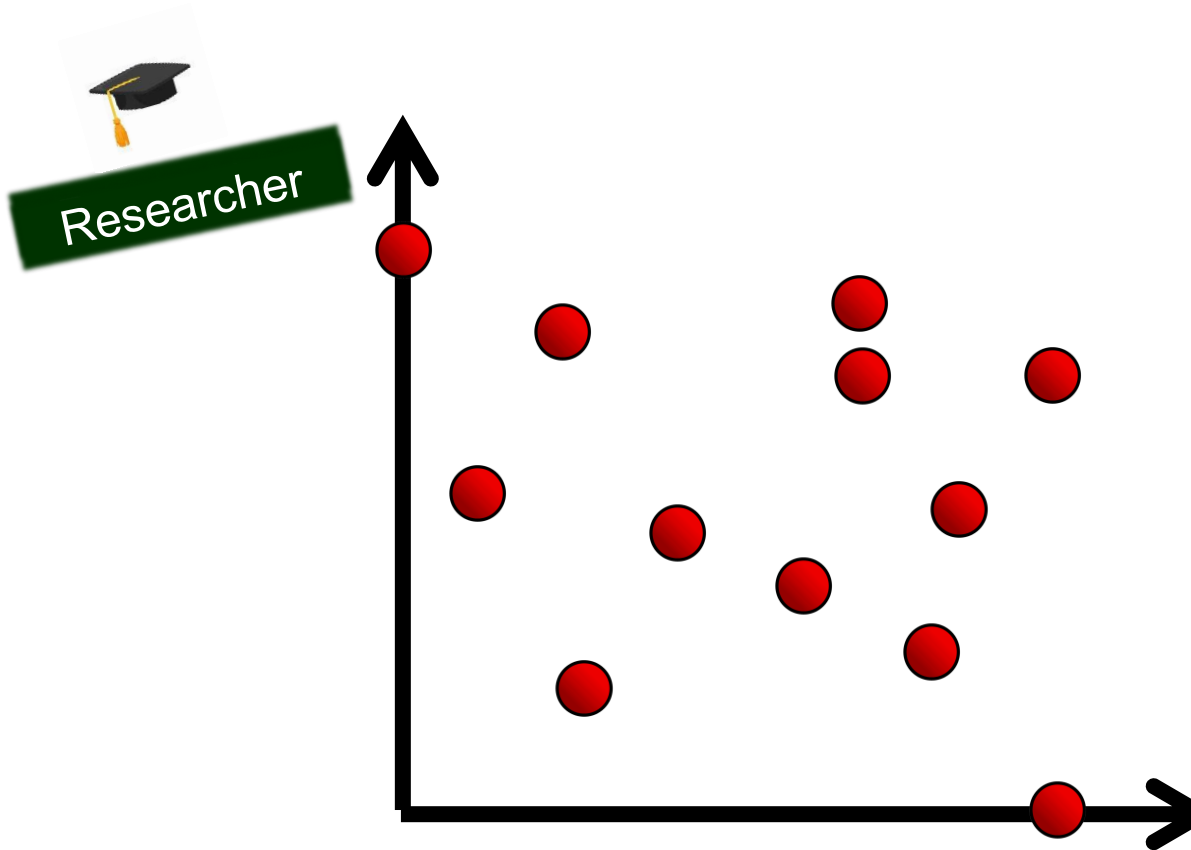


MASHAL: Teachers
Patriciate in Research

TRAIL: Teacher-Researcher Alliance for Investigating Learning



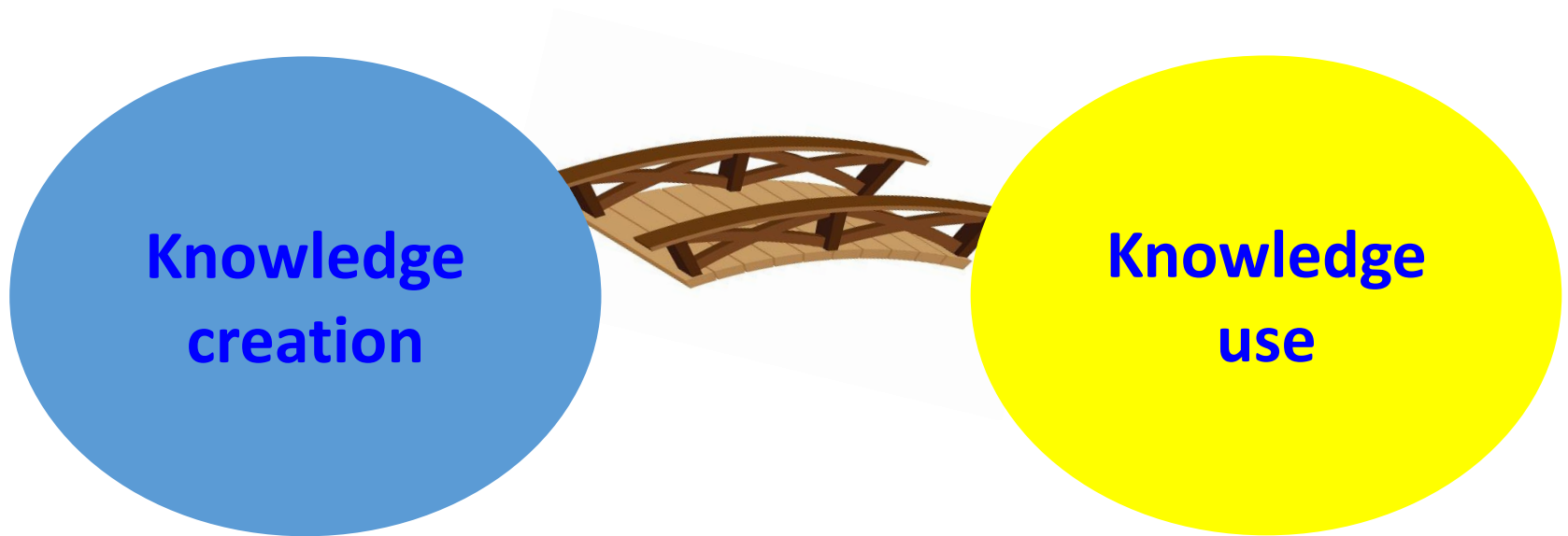
Where would you put yourself?



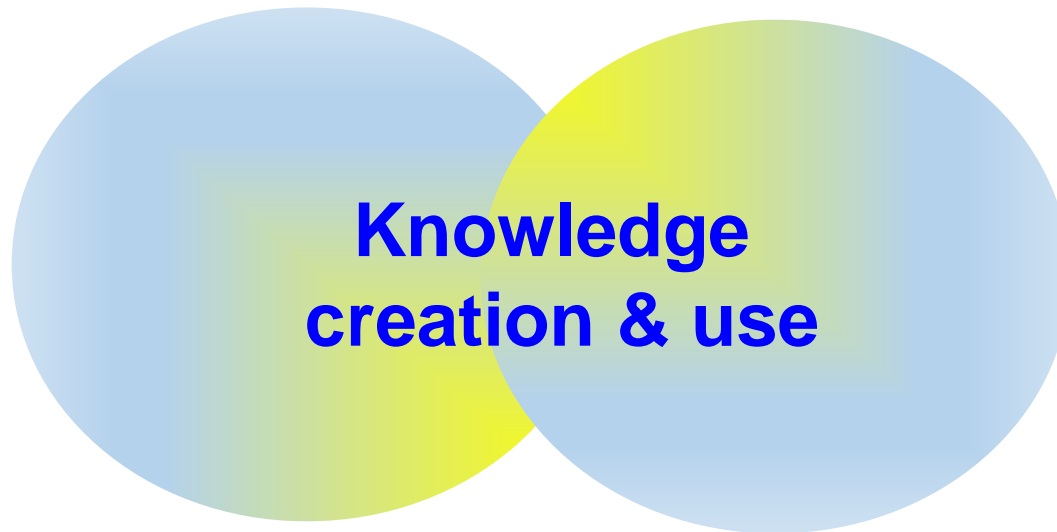
What is TRAIL?

- A project
- An emerging PD model
- A way for scaling up ed. research
- An emerging framework

What problem TRAIL attempts to address?



Duality



Teacher - Researcher Alliance:
On what ground?

Inquiry

Inquiry: “trying to develop some new knowledge or understanding” (Menter et al., 2011)⁷

Both teachers and ed. researchers...

listen to students

examine student work

assess what students know

suggest how students think

design tasks

design teaching sequences

compare approaches

talk to colleagues

learn through practice

read

think...

Teacher inquiry

Practice-oriented

Normative

Experience-based

Particular

VS.

Researcher inquiry

Theory-oriented

Analytic

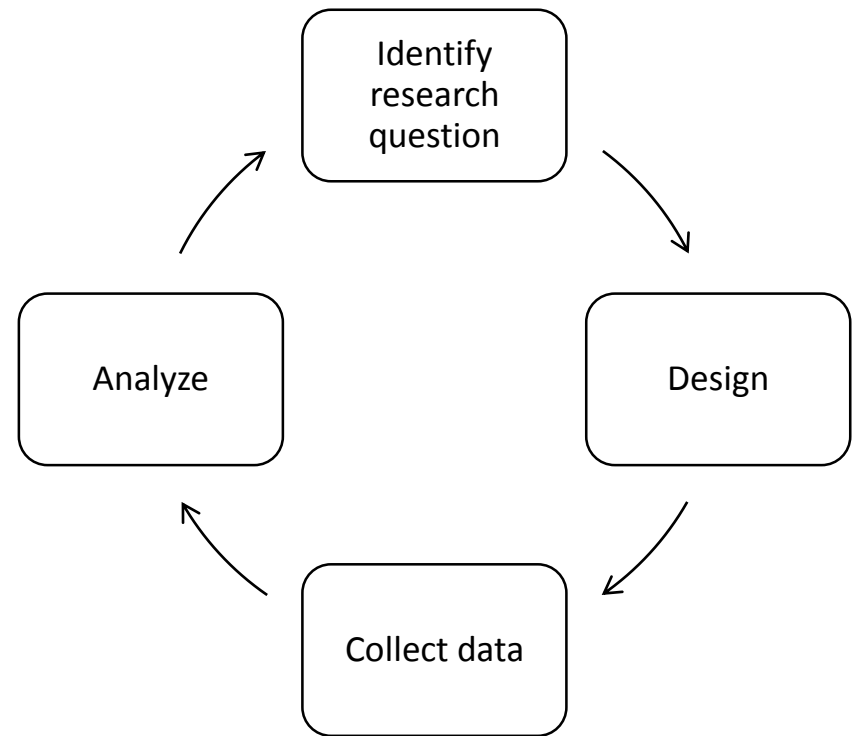
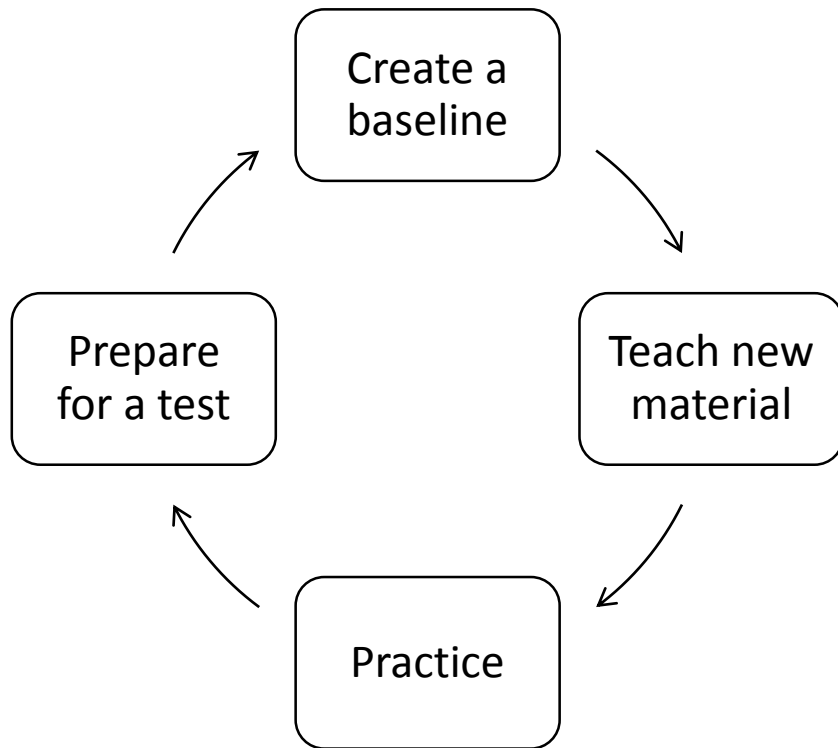
Methodologically sound

Universal

Teaching cycle (1 school year)

vs.

Research cycle (2-4 years)



Both teachers and ed. researchers like solving interesting problems

Twenty five tennis players take part in a tournament. A player who loses a match leaves the tournament. A player, who does not have a partner in one round, automatically advances to the next round. How many matches are scheduled in the tournament?





$$12+6+3+2+1=24$$

64 tennis players take part in a tournament. A player who loses a match leaves the tournament. A player, who does not have a partner, automatically advances to the next round. How many matches are scheduled in the tournament?



65 tennis players take part in a tournament. A player who loses a match leaves the tournament. A player, who does not have a partner, automatically advances to the next round. How many matches are scheduled in the tournament?



N tennis players take part in a tournament. A player who loses a match leaves the tournament. A player, who does not have a partner, automatically advances to the next round. How many matches are scheduled in the tournament?



**The number of games = the
number of losers**



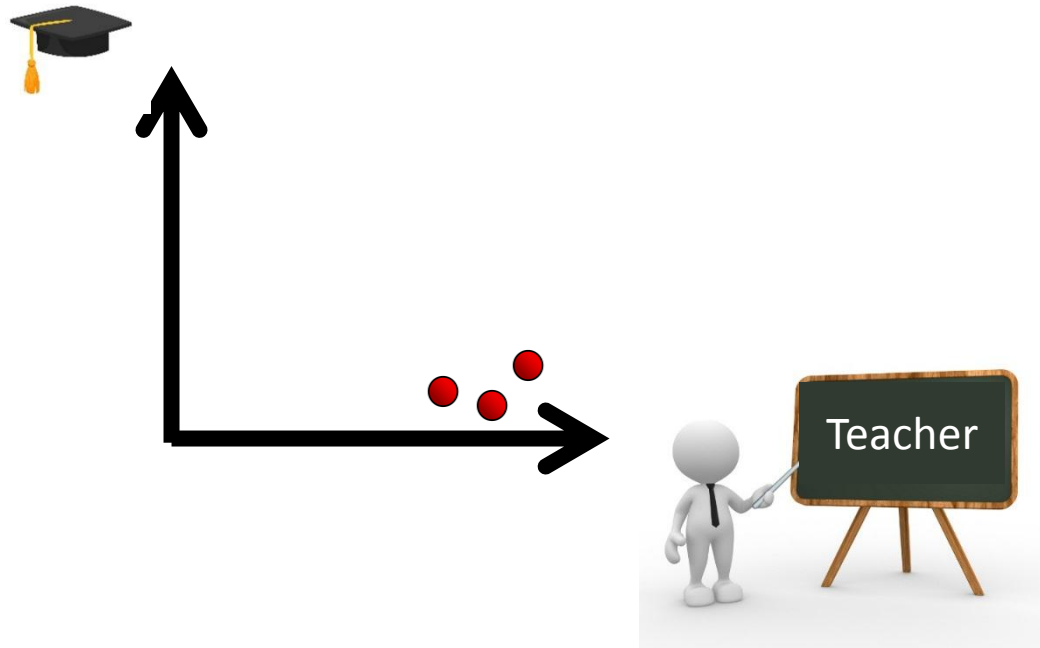
**There is one winner at
the end**

Answer: $N-1$

What this problem about?

Flexibility

Who is TRAIL for?



What questions such teachers are interested to explore?

How can I help my students to deal with the stress of matriculation exams?

How to teach in a heterogeneous class?

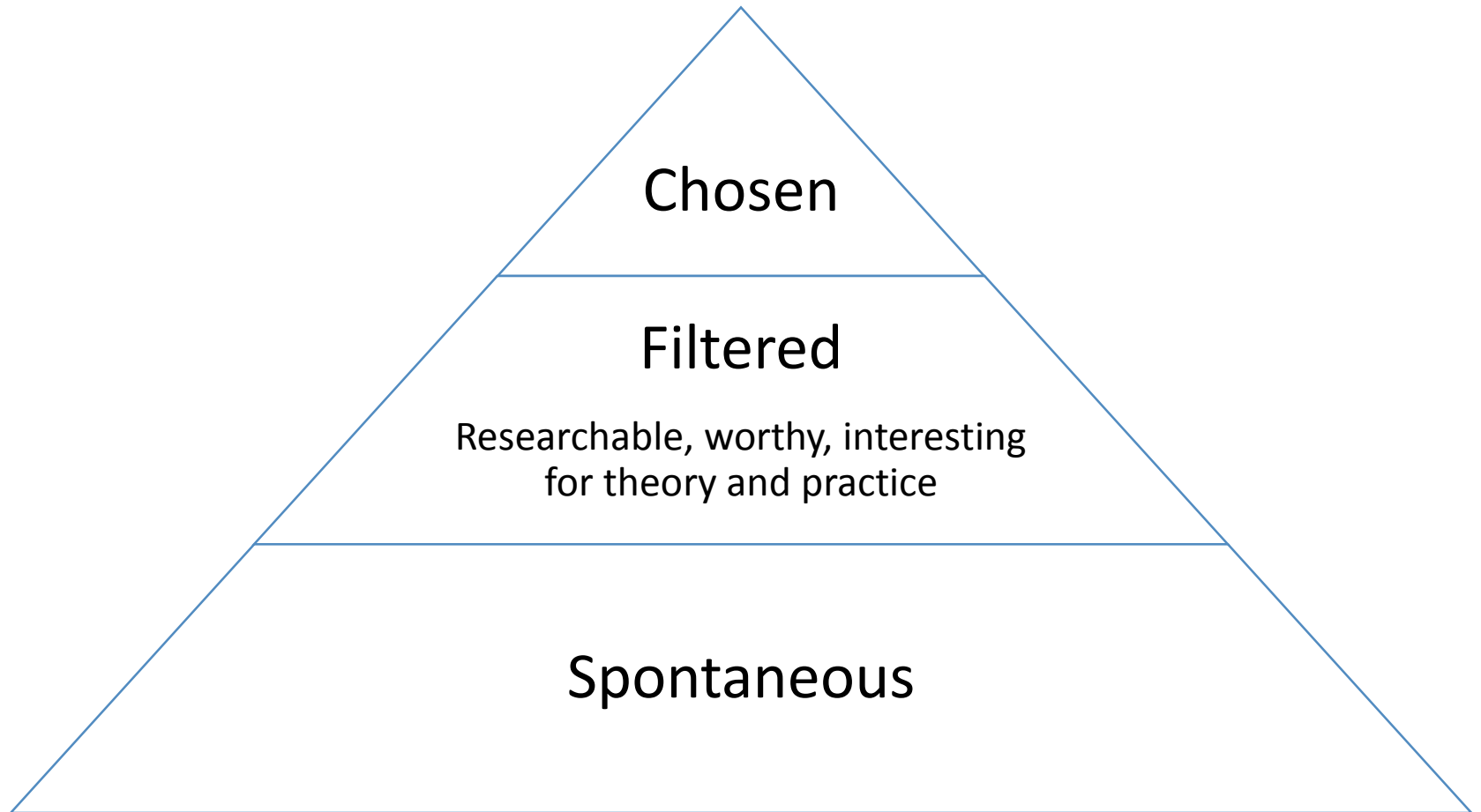
How can I encourage my students to be more independent?

How can I know if my students really understand me?

How can technology help me in teaching trigo?

Which questions do I ask in my lessons and how these questions affect student learning?

Identification of questions



Questions chosen

Question on questions:

What are characteristics of a classroom situation rich with student questions?
(Rehovot 1)

Question on flexibility:

How can we help students to flexibly move among different representations and different strategies? (Haifa 1)

Question on “talking tasks”:

How to balance problem solving and doing exercises, by means of sequences of “talking tasks”?
(Rehovot 2)

Question on surprises:

What classroom events are surprising for me and/or my students? How can I surprise students in good ways? (Haifa 2)

Question on problems we like:

What mathematics problems do we like and how to incorporate these problems in teaching? (Mofet)

How does TRAIL work?



TRAIL premises

- ***PD via Involvement in Research*** premise
- ***Authenticity*** premise
- ***Choice*** premise
- ***Shared Agency*** premise
- ***Win-win*** premise
- ***Feasibility*** premise

What can TRAIL be good for?

As a project: attracts experienced and open-minded teachers

As a research model: opportunities to explore various research questions of R&P importance. Scaling up.

As a PD model: opportunities of *learning for* and *learning through* participation in research.

Mix of the didactical and the a-didactical



Jason Cooper

Rochie Zaks



Mirela Widder



Menuha Farber



Galia Gonen



Boris Koichu



Bina Brosh

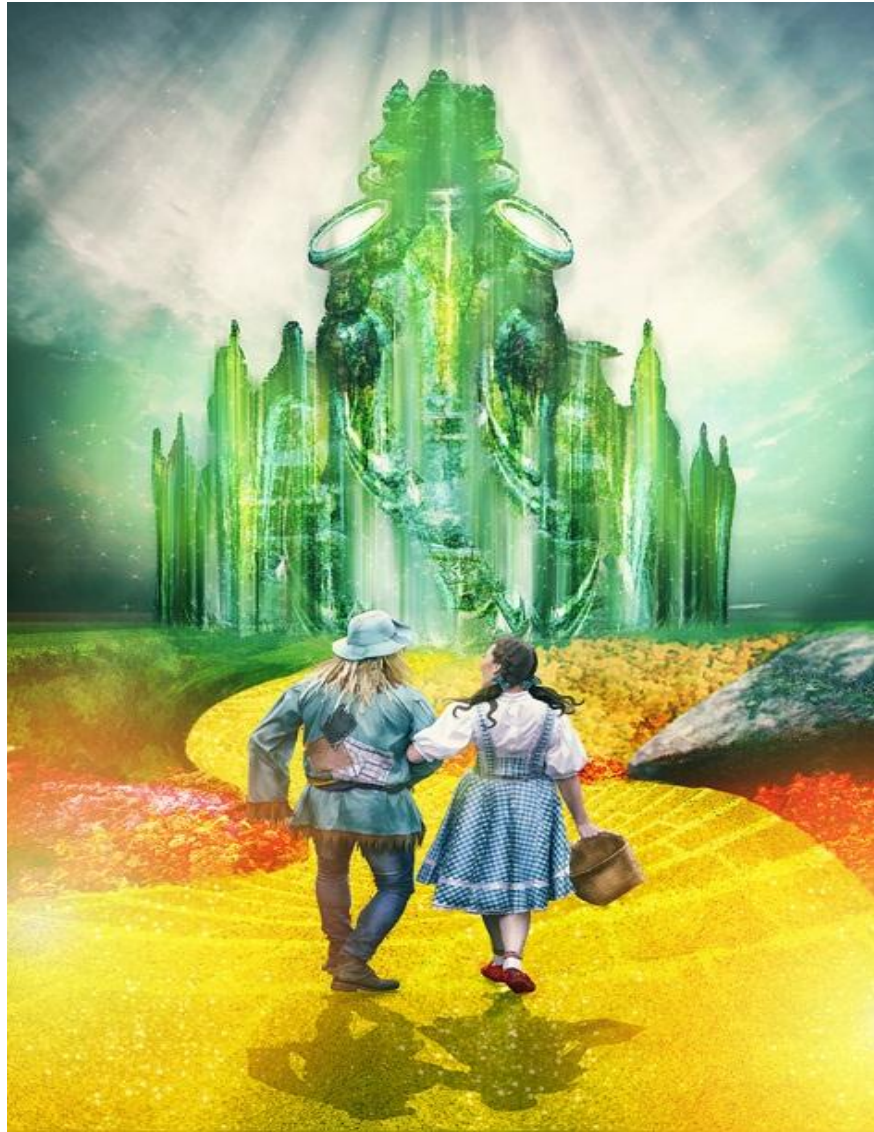


Alon Pinto



Myriam Goor





Let's go for a TRAIL!