

Games in primary school

By Alon Nir – Founder Formula Games

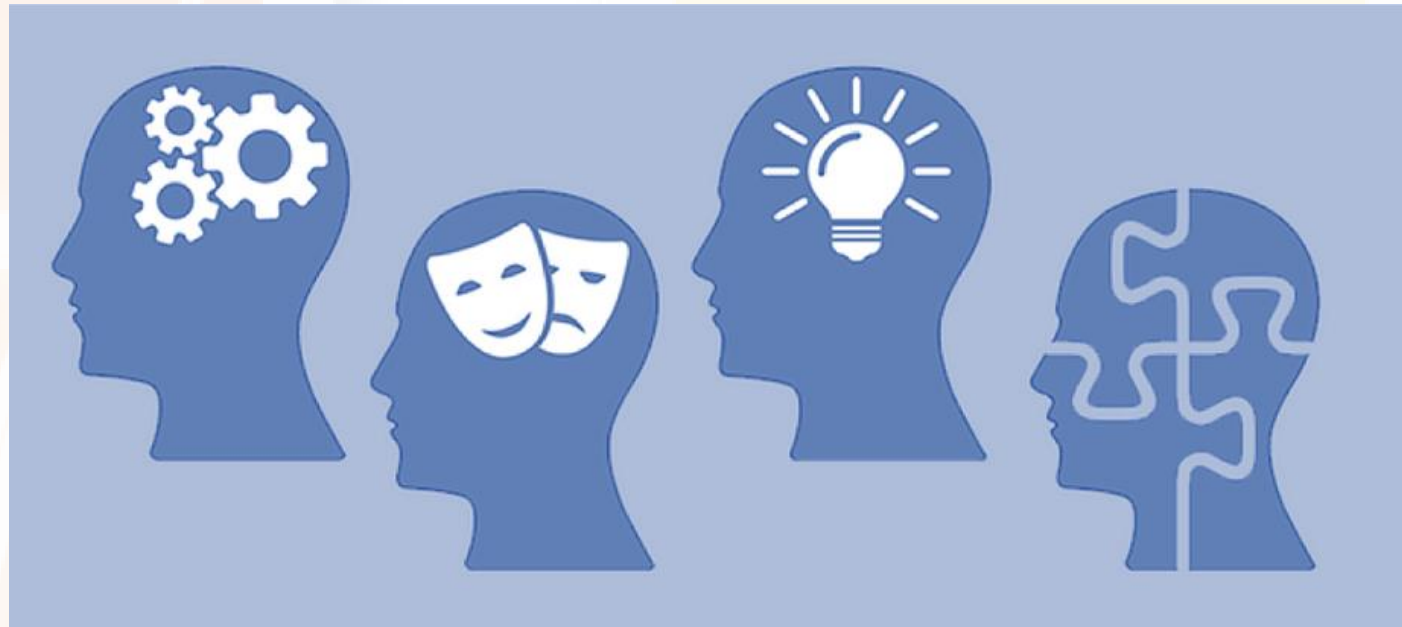
“On average, using academic games in the classroom is associated with a 20 percentile point gain in student achievement”

- Marzano (2010)

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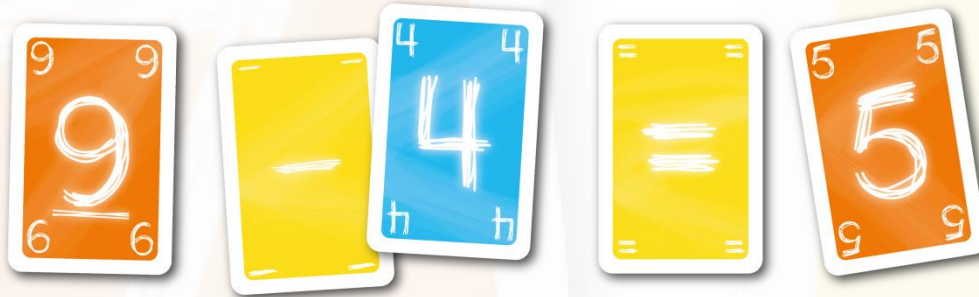
1. Introduction of Formula Games
2. Let's play!
3. Why use games in the class room?
4. Behavior problems
5. How to get the most out of games?
6. Summer dip – responsibility of parents?

Who am I? Who are you?



Introduction of Formula

- Established in January 2019
- Developer and publisher of Formula
- Formula is a family game and educational



- Perfect to be played at home, in school or on holiday

Inspire to Create

A long long time ago



The Inspiration



Future...



Let's Play!

- Please stand up and look under your chair
- =, +, -
- Numbers

"Make a Formula with other people in the room"

Games in Life...



Stand 5A114



Games in Life...



Stand 5A114

Advantages in Education:

- Motivation
- Improvement
- Confidence
- Retaining attention

Games in the Class Room

Games offer:

- A safe place to learn social skills.
(e.g: how to help each other, teamwork, how to deal with losing or with cheaters.)
- Practice in concentration and self control (and other executive functions)
- A new way to reach kids who need extra attention

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- Practice in concentration and self control (and other executive functions)
- A new way to reach kids who need extra attention
- Challenges to (*highly intelligent*) students
- A fun way of bringing certain knowledge into practice.
- Create positive memories while learning

Making it Fun!

Education becomes:



Fun



Attractive



Effective



It's our Responsibility to Educate

Skills that can be learned / improved



Executive functions

(11 skills to execute or perform tasks and solve problems)

Ref: Dawson & Guare: 2009 & 2010



Social skills



Creative thinking

It's our Responsibility to Educate

Skills that can be learned / improved



Executive functions

(self-control, planning, regulations of emotions, taking initiative, time management, flexibility etc)



Social skills



Creative thinking



Motor skills



Language skills



Mathematics



Other school subjects

Solving Behavior Problems

Playing games for 30 minutes per day in a structured manner is as effective as the current gold standard treatment for preschool behavior problems, behavior management

Ref: Healey&Healey: Nature, 3497, 2019



Solving Behavior Problems

PLAYING GAMES:
Time effective
Cost effective
Proven results



How to get the most out of games?

Prepare & set goals



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Observe



Evaluate



Prepare & Set Goals

1 Activate

the knowledge that they have to use

2 Agree

on what they have to work on during the game

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3 Examples

- Read the rules before you start
- How do you act when you lose?
- And so many more...

Observe



Be conscious:
intervene or not?



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Give back your observations
during the evaluation?



www.formulagames.eu

Evaluate



Executive Skills

- What were the goals?
- How did you prepare?
- What did you achieve?
- What could you do better?

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Soft Skills

- What did you like about playing the game?
- What can be improved?
- What can we do to help make you better?

Summer dip

- Summer learning loss is on average 1 month of school
According to American research (Cooper 1996)
- Loss in maths is 2.6 months on average! *(Cooper 1996)*
- Summer holidays are longer in the US
- Austrian and Swedish research have confirmed there is a loss but not as strong

Summer dip: responsibility of parents?

- Holiday = time to relax
- HOWEVER:
 - We recommend to have kids read
 - We recommend to keep practicing the other subjects, like maths

Summer dip: responsibility of parents?

- Holiday = time to relax
- HOWEVER:
 - It is recommended to have kids read
 - It is recommended to keep practicing the other subjects.
- How? **By playing games like Formula!**

Main message of today

- Playing games in the class room is:



Fun



Attractive



Effective

Thank you!



Appendix: Scientific Studies

Good starting point. These articles reference to other articles that are worthwhile as well, depending on your particular interest.

- Literature Review: Effectiveness of Gaming in the Classroom - Karen A. Milczynski Michigan State University
- Using Games to Enhance Student Achievement. Meeting Students Where They Are, 67, 71-72. Marzano, R. J. (2010).
- A desire to be taught: Instructional consequences of intrinsic motivation - M.R. Lepper, D.I. Cordova 1992 Motivation and Emotion v16 no3 p187-208
- Play in evolution and development - Anthony D. Pellegrini a,α , Danielle Dupuis a , Peter K. Smith b Developmental Review 27 (2007) 261-276
- Executive Skills in Children and Adolescents: a Practical Guide to Assessment and Intervention, Dawson & Guare (2010)