DESIGNING GAMIFICATION ENVIRONMENTS FOR THE TEACHING AND LEARNING MATHEMATICS

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GAMIFICATION

The use of game design elements in non - game contexts.

(Deterding et. 2011)



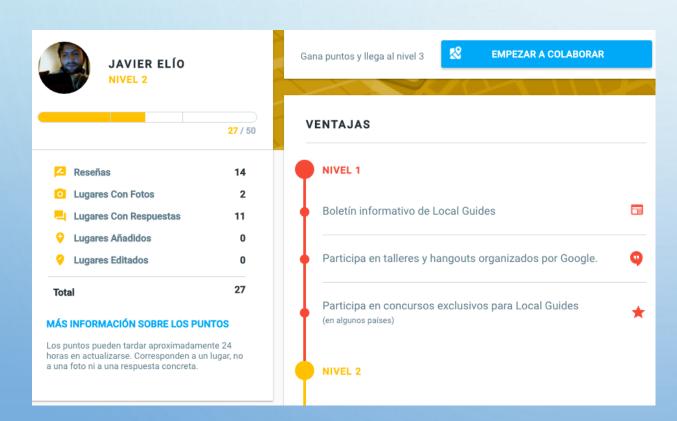
SOME EXAMPLES

Cursquare













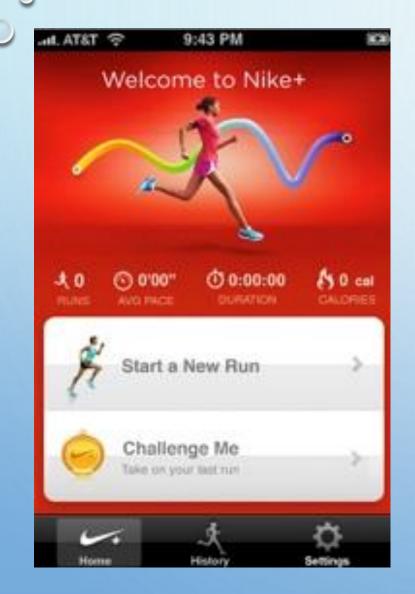








NIKE +







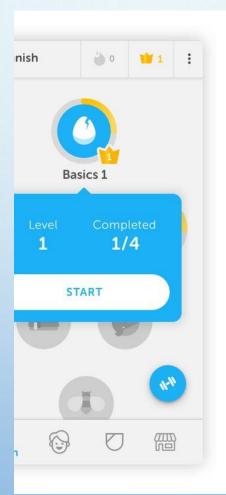




















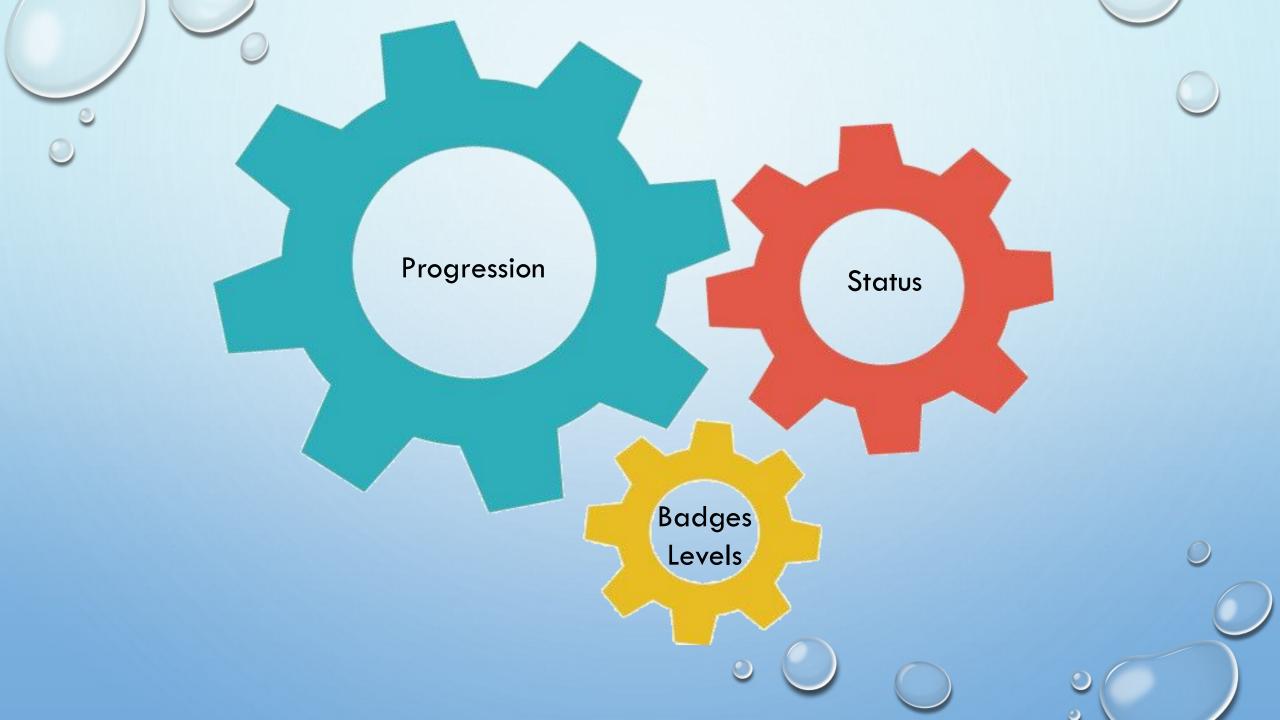


ELEMENTS

Dynamics: Rules - Narrative - Progression

Mechanics: Challenge - Reward - Feedback - Status

Components: Points - Levels - Leaderboard - Content unlocking - Badges



Player Types (Bartle (1996))

- Achiever
- Explorer
- Killer
- Socializer



Why gamification within education?

Motivation

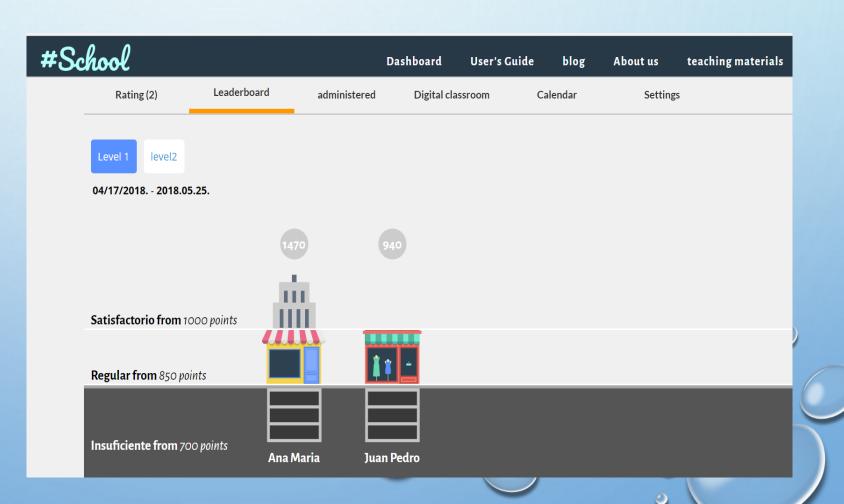
Engagement

Change behaviours (group work, etc)





- **✓** Points
- **✓ Leaderboard**
- **✓ Levels**
- ✓ Crate New Material
- ✓ Material Repository
- **✓ Create New Class**

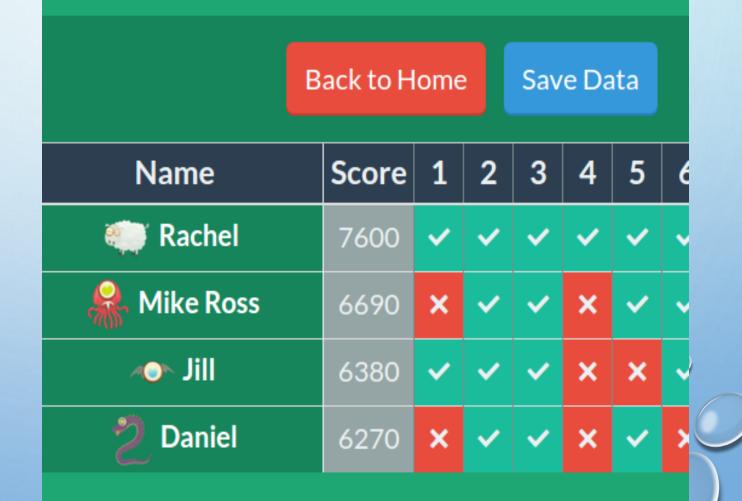




Quizizz

- **✓** Points
- √ Leaderboard
- ✓ Challenge

- **✓ Create New Material**
- **✓** Material Repository

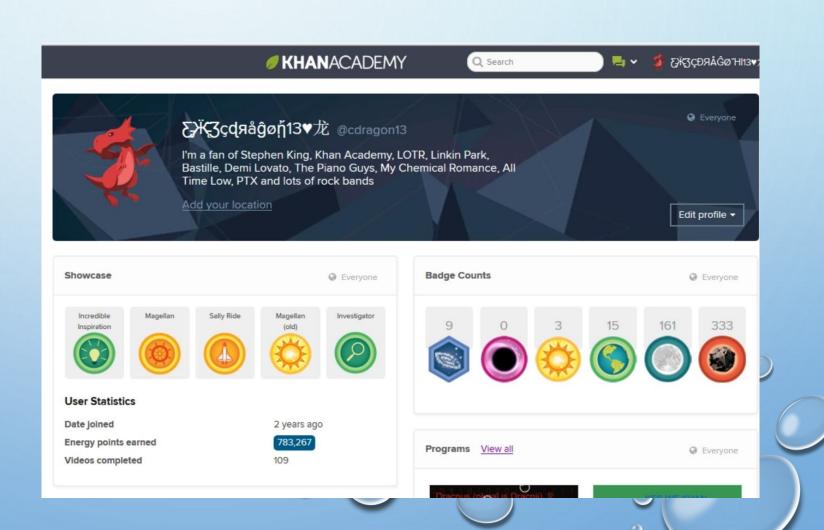




KHANACADEMY

- **✓** Points
- **✓** Badges
- ✓ Avatar
- √ Achievement

- **✓** Material Repository
- **✓ Create New Class**





Why some gamification features are incorporated? And why not others?

Which features should a good gamification editor have?

Thank you for your attention.

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