

Institut für  
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# Potentials of Gamification in LMS: A Qualitative Evaluation

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# Gamification (I) - Examples

- This slide used to contain the following images which were removed for potential copyright concerns:
  - A badge from edmodo.com
  - An example of progress at codeacademy.com (using badges to show partial completion)
  - A promotional screenshot from classcraft.com

Images (l2r, t2b): edmodo.com, Codeacademy (via huffingtonpost.com), classcraft.com

## Gamification (II) - Definition

„The use of game design elements in non-game contexts“

- Deterding et al. (2011)

„using game-based mechanics, aesthetics and game thinking to engage people, motivate action, promote learning, and solve problems“

- Kapp (2012)

Deterding, S., Sicart, M., Nacke, L., O'Hara, K., & Dixon, D. (2011). Gamification: Toward a Definition. Vancouver: ACM.

Kapp, K.M. (2012). The Gamification of Learning and Instruction: Game-based Methods and Strategies for Training and Education. San Francisco: Pfeiffer.

# Gamification in Learning Management Systems

- Half of the top 20 LMS on Capterra are listed as being gamified
- Badges are everywhere
- What else?



Badges from [MoodleBadges.com](https://moodlebadges.com) licensed under CC-BY-SA



# Expert Study on Gamification

- List of terms used in literature to describe gamification
- Ranked by experts for their relevance in describing
  - Gamification in general
  - A gamified system of the expert's choice
- Result: Ranked list of terms that may signify gamification



## Methods (I)

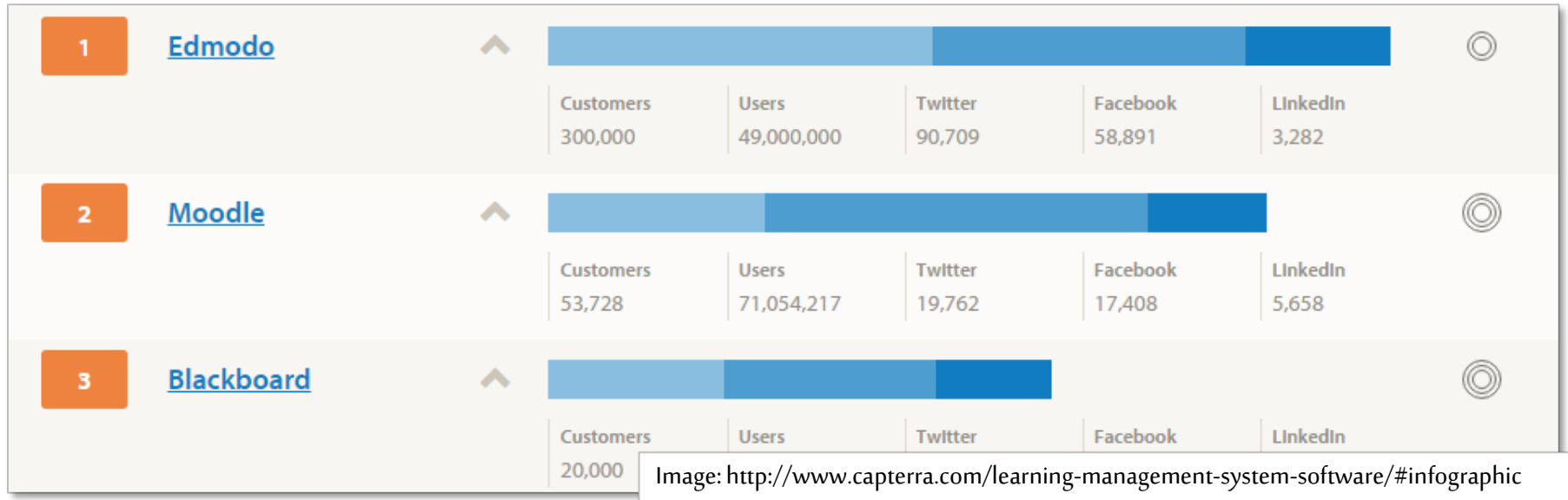
- Catalogue of 38 items as indicators of gamification
- 5 Categories:
  - Experiential
  - Mechanics
  - Rewards
  - Goals
  - Social
- Items consist of: term, question, closed response, open response

## Example Items

ID	Category	Term	Question
E3	Experiential	Challenge	Does the system include tasks designed to be challenging for the user to complete?
M1	Mechanics	Collecting	Does the system provide opportunities for the user to collect things?
R5	Rewards	Points	Does the system reward users with points of any kind?
G1	Goals	Clear goals	Does the system provide the user with clear goals / ideas about what to do next?
S1	Social	Fame / getting attention	Does the system provide means for the user to gain fame / attention?

## Methods (II)

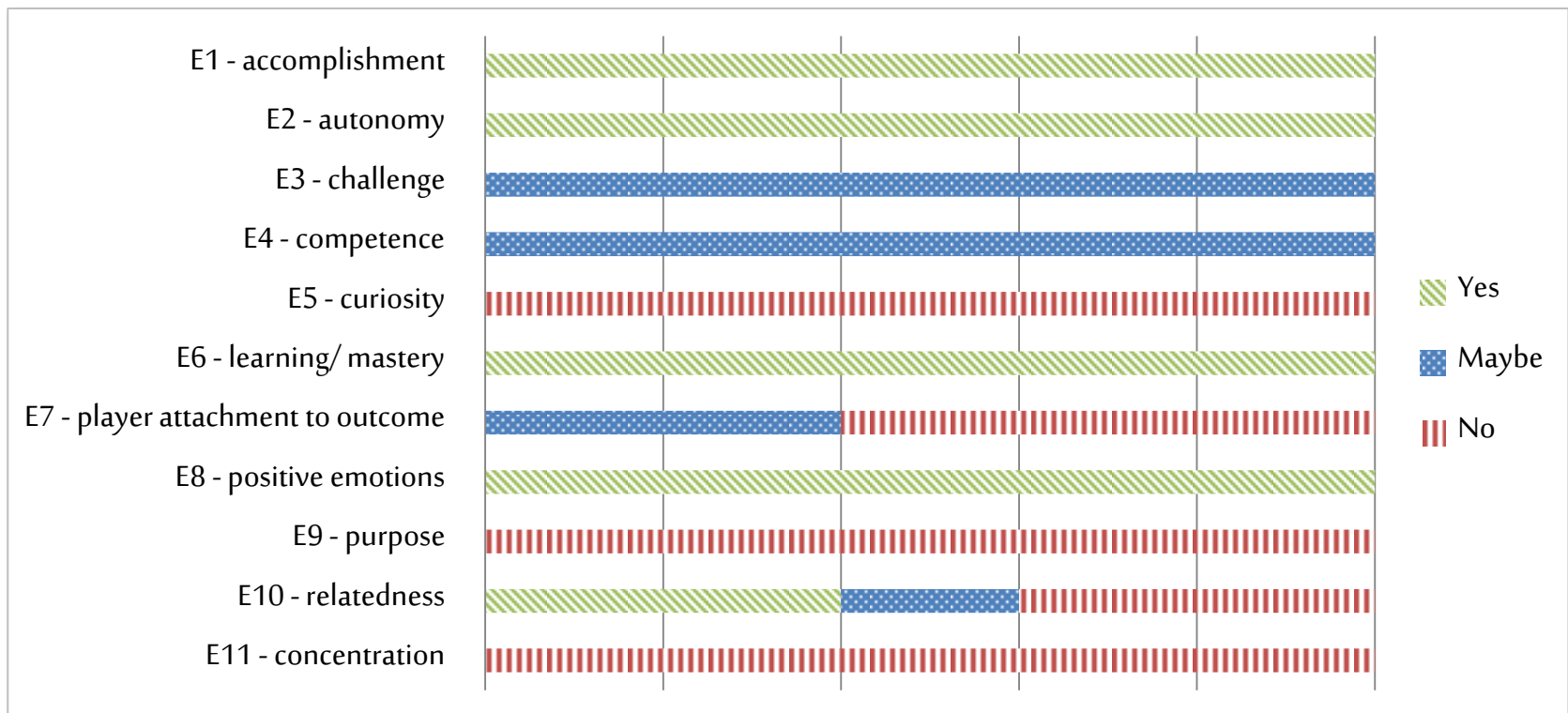
- Applied to top 5 K-12 and higher education LMS (according to Capterra) by 4 evaluators.
  - Moodle, Edmodo, Blackboard Learn, Schoology, and Canvas (at the time of research)





## Results (I) – Closed Responses

- Results of the closed responses for the experiential category. Each interval signifies one LMS.



## Results (II) – Interesting findings

- Systems highly similar in their use of gamification
- Ubiquitous use of badges but not points and levels
- Almost no competitive elements
- Many highly regarded gamification elements missing
  - E.g. storytelling, nurturing/growing
- Overlapping goals and methods make game influence hard to identify
- Dependence on instructor input



## Conclusion

- Gamification in LMS still in its infancy
- Many elements of gamification have been common in education for decades
- Affordances for gameful experiences may be less relevant than affordances for creating those affordances.

Questions, comments, etc.: [jbroer@ifib.de](mailto:jbroer@ifib.de)