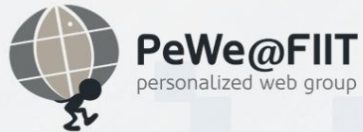


# Dynamic Score as a Mean for Motivation of Students in an Educational System



Richard Filipčík  
Mária Bieliková (supervisor)

richard@filipcik.sk



Motivation is very important in the learning process.  
There are many ways on how to motivate student.



Gamification is becoming increasingly popular  
way to motivate and support learning process.

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We know several gamification techniques.  
One of them are score and pointing systems.

## Gamification

- use of game mechanics in non-game contexts (e.g. social networks, educational systems)
- relatively new (first known mention of term "gamification" comes from 2002)
- various forms - badges, scores, achievements, leaderboards, etc.



according to Google Trends service, popularity of  
gamification is permanently rising in the last years

## Score as a gamification technique

- one of the most popular gamification techniques
- there are many ways on how to compute and design score



Stack Overflow votes



Facebook likes



eBay karma



ALEF score

## Dynamic score

 **student performs activity**

ALEF offers multiple ways on how to learn and  
earn some points thanks to it (e.g. tagging,  
adding external sources, highlighting text)



**ALEF computes new priorities**

based on previous students activities ALEF computes  
new priorities in order to motivate students to  
perform all activities equally



**students see new priorities**

thanks to ALEF's stream students can see  
priorities change so they know which particular  
activities earn them more points

### activity weight

- constant value, does not change over time
- represents difficulty of the activity to perform for an average student
- based on historical data
- activities with lower weight are less difficult and takes less time to perform



### activity preference (manual)

- based on teacher requirements
- teacher can set which activities will be preferred
- represented by a number within the range expressed by select list
- higher number means higher level of preference



### activity priority (auto)

- dynamic factor, computed by ALEF itself
- depends on the amount of activities performed by students
- expresses the relationship between the expected and the actual ratio of activities performed
- higher ratios quotient = lower score addition

