Impact test results:
Futuclass Oxygen bundle

Test date: 26.11.2020
Test name: v. 0.4 educational impact test
Test group: 25 regular 8th grade public school students (14-15y) who have not studied chemical equation balancing before.

Target: avg 60% improvement of test results (before/after)

Modules tested: Futuclass - Reaction balancing v.0.4.4
Futuclass - Oxygen escape room

The main learning goal of the modules is to master chemical equation balancing.

Test description

Test duration: ~15 minutes.
Test max points: 22
Consists of 19 points from equation balancing tasks and 3 from oxygen related questions.

Below are examples from the three main exercises in the tests:

Task: Balance chemical equation
Max points: 4

Task: Balance chemical equation
Max points: 10

Task: Draw the substances
Max points: 5

Test results

P (two tailed) = 0.000004646 (accidental result probability 0.00046%)
Cohen's D = 1.17
Before test avg result = 4.02 (SD 6.03)
After test avg result = 10.6 (SD 5.11)
No outliers

Students showed an average of 62.1% improvement in a test taken after learning with Futuclass VR learning module compared to the result before using the Futuclass VR learning module.