



FUTUCLASS

Educational virtual reality games

$$a = \frac{v^2 - v_0^2}{2s} \quad \omega = \frac{\phi}{t} \quad v = \omega r$$

$$v = \frac{\lambda}{T} \quad T = \frac{1}{f} \quad v = \lambda f \quad a = \frac{F}{m}$$

$$F_s = -kx \quad A = rscos\alpha \quad E_x = -$$

$$\vec{p} = m\vec{v} \quad \vec{v}_1 \quad \vec{v}_2$$

$$pV = \frac{m}{M}RT \quad Q = \Delta U + A \quad \eta$$

$$\frac{F}{q} \quad F = k \frac{q_1 \cdot q_2}{r^2} \quad U = \frac{A}{q}$$

$$U = \phi_1 - \phi_2 \quad C = \frac{q}{U} \quad C = \frac{\epsilon\epsilon_0 A}{d}$$

$$\frac{U}{R} \quad I = \frac{\epsilon}{R+r} \quad A = IUt$$

$$F_L = Bqvsin\alpha \quad T = 2\pi\sqrt{LC}$$



108g ll 0=0



$$M[H_2O] = 1 \cdot 2 + 16 = 18g/mol$$

STUDENTS STRUGGLE with physics, chemistry and math

The Problem

- Low student engagement in natural science classes
- Theoretical and boring lessons make children lose interest
- Understanding 3d world on 2d board is complicated
- Not enough practical lessons to understand "WHY are we learning this" "What can be done with this knowledge"

Building and managing VR arcades

People visited the VR arcades in 3
years:
to play **40 000 HOURS** of VR games



The Solution

Interactive **science**
experiments in virtual
reality (VR)

Futuclass is an educational game where children do interesting and fun science experiments in safe environment - in VR.



+



Why VR?



Virtual immersion – see,
touch, hear, feel –
multisensory learning

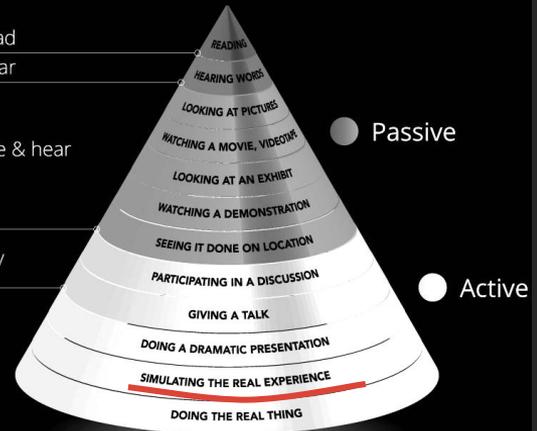
After two weeks,
we tend to remember ...

10% of what we read
20% of what we hear

50% of what we see & hear

70% of what we say

90% of what we do



Adapted from: Edgar Dale *Audio Visual Methods in Teaching*, Holt, Rinehart & Winston.

Research topics: benefits of multisensory learning

Futuclass

Educational platform game that consists of learning modules for different topics

Game library

1) Physics

2) Chemistry

3) Math

1) Moles

2) Oxygen

3) Reaction eq. balancing



Two types of modules:

1) Escape rooms

- to deepen the knowledge and bring real-life examples
- Problem based
- Experiential learning

2) Learning modules

- Level progression
- Mastery based



Pedagogy

XEDU accelerator partners



Education designers from Tallinn
University



Co-creation schools



Learning modules **fit into curricula**

Offline + online **lesson plans**

In-game reflection and post-game
worksheets

Virtual reality in classroom education



Koosloome tund Põltsamaa Ühisgümnaasiumis

VR practical lesson

10 min - introduction

30 min - VR lesson

10 min - reflection

Lessons in Estonian schools

<https://sites.google.com/view/futuclassi-koosloome>



- 200 co-creation sessions
- 15 co-creation teachers
- 6 partner schools

Chemistry lesson during Covid



VR will transform education, especially after the new world order has introduced and half of the world has got a taste of homeschooling

Futuclass brings chemistry and physics practical lesson to whenever the student is.



Core Team



**Kristen
Tamm**
Locomotive

Founded 4 VR
arcades with
40 000+ hours of
VR gameplay

Futuruum arcade
chain in top 50 in
the world



**Jens-Stefan
Mikson**
Tech lead

Designed and
developed VR games
since 2017

Developed 2 online
multiplayer VR
games from 0-100%
alone



Karl Lomp
**Content design
lead**

Psychologist
experimenting with
VR since 2015

Designed Water
safety VR game for
Estonian Rescue
Board



Märt Lume
Product lead

In games and
software
production since
2008

... including 4 years
with the team that
built Slack



Gleb Skibitsky
Unity developer

Game developer
since teens, worked
at Game Insight

Pioneer in gamifying
crypto mining



**Arnold Rein
Tatunts**
Content designer

Science populariser
since 2016

Designed science
competition
assignments for
Rakett69 for 3 years

Target platform

Futuclass is optimised for standalone devices, but will be available for both wireless and tethered devices.

Managment platform for schools:

Grove Learning 

Stores for end-users:

SideQuest VR



Steam



Oculus



Focus on **standalone headsets**

Oculus Quest, Vive Focus, Pico Neo etc



PC powered headsets

HTC Vive, Valve Index, Oculus Rift, windows mixed reality etc

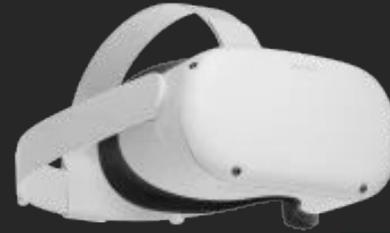


VR ADOPTION

90% of Oculus Quest buyers are first time users

During pandemic Oculus has sold headsets as quickly as they have been able to manufacture them.

October 13 (in 4 days) new **CHEAPER** Oculus Quest 2 starts shipping



299\$



Futuclass Pricing



**Monthly subscription
for schools** (extra value:
lesson plans, user
management etc)
15€ per headset /per month



**One time purchase +
in-app purchases for
HOMESCHOOLERS**
(parents, private teachers) 5
modules for 50€ and 10€ per
module if bought separately

Futuclass game library covers

- 1) Moles
- 2) Oxygen
- 3) Reaction equation balancing
- 4) pH
- 5) Acids and Bases
- 6) Atom structure
- 7) Molecules
- 8) Bonds
- 9) Redox reactions
- 10) Hydrogen
- 11) Salts
- 12) ...

Students feedback for Futuclass

“Futuclass about Moles and Molarity was exciting, would love to learn other subjects like this as well.”

“I liked that I was able to do everything myself.”

“Today's lesson was so different and I really enjoyed doing experiments in VR.”

Feel free to write!



Contact

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kristen@futuclass.com

- 1) **SCHOOLS** interested in using Futuclass
- 2) **PUBLISHERS** (and edtech companies) for partnerships
- 3) **INVESTORS** to join us on our way to bring VR into education