Game research for training and entertainment

Serious Game Design for Playful Learning

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Carkit (HKU)
StoryBOX (Waag)

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Research cluster Games & Interaction
Applied Game Design
Hogeschool voor de Kunsten Utrecht

AIMS

Problem with physics education on paper: static representation of dynamic system

Level: 4 HV

Aim: ‘feel’ or ‘experience’ the formula

Mass, Friction, Force and its interplay

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CONCEPT

Concept art 2nd iteration

Classroom reality:

1. Practice at home: iterative learning
2. Bring best design to school
3. Race against others (multiviewer race)
4. Analyse success factors
5. Back to 1
6. Transfer (what did you learn)

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FEATURES

Configure your vehicle

RESULTS

Plan a testrun

RACE

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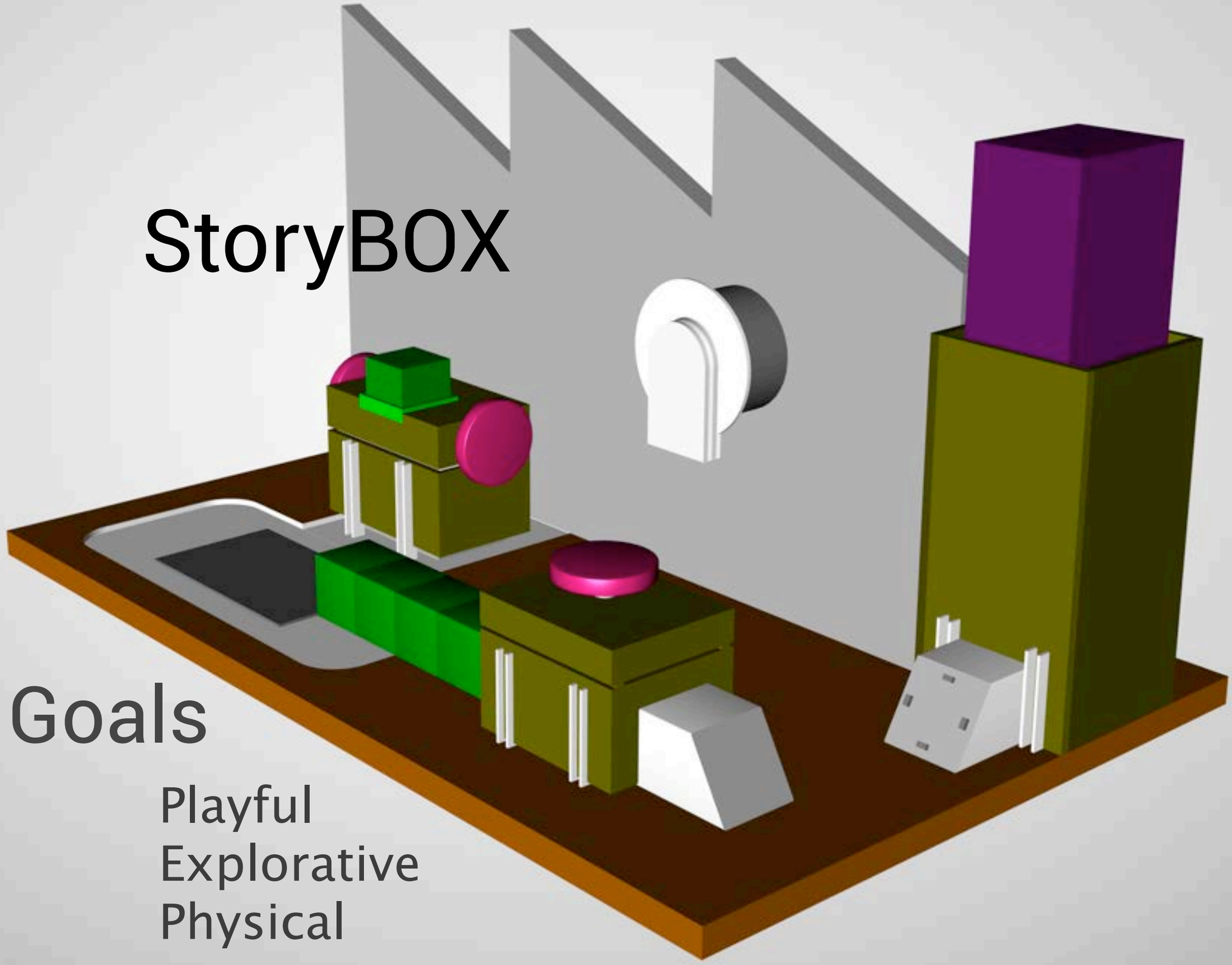
LESSONS LEARNED

! NECESSITY ITERATIVE DESIGN

! BRIDGE THE CONCEPTUAL GAP
between subject matter experts and designers

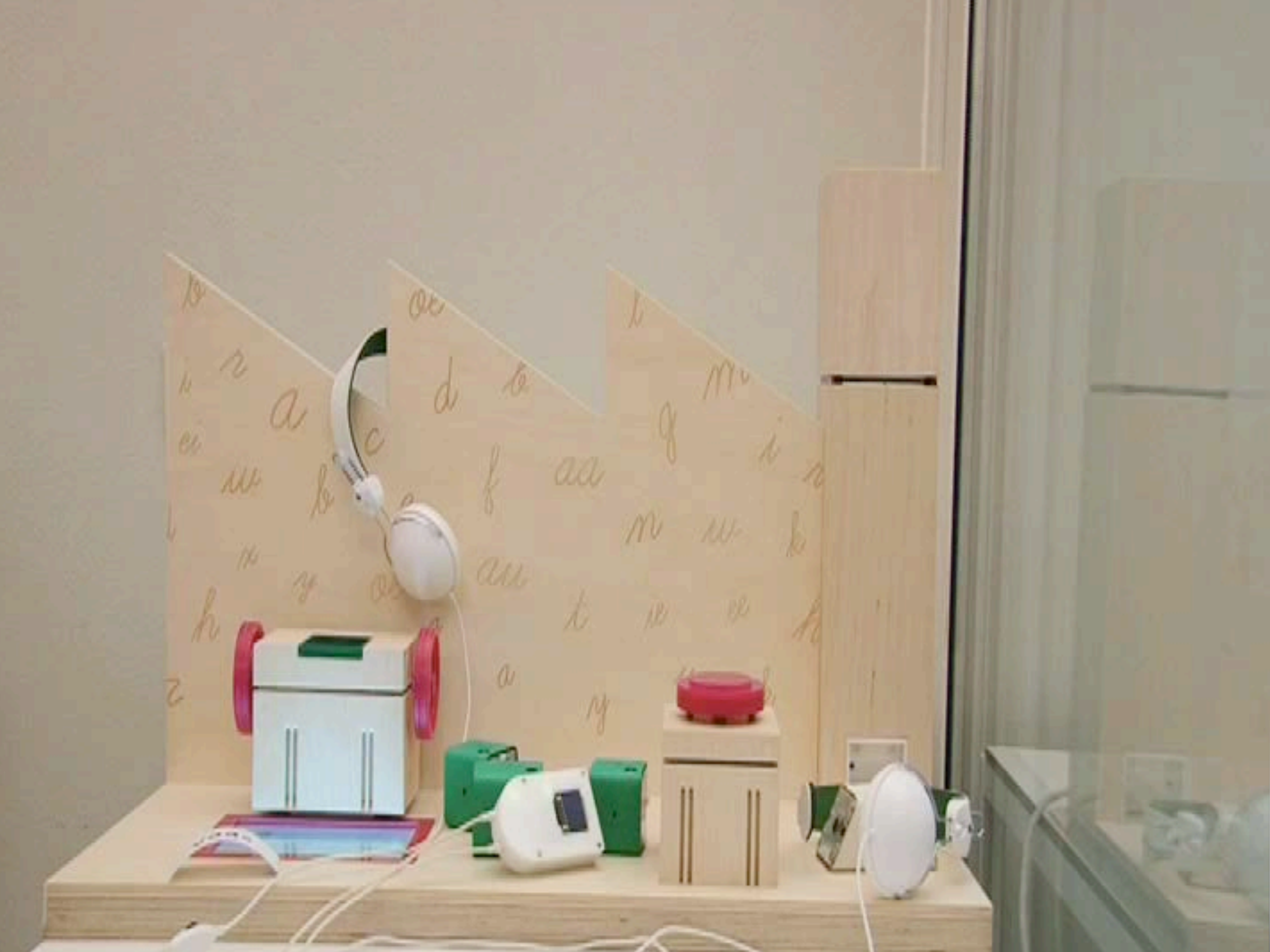
! MARKET CONDITIONS FOR SCALABILITY
many roadblocks from prototype to market

StoryBOX

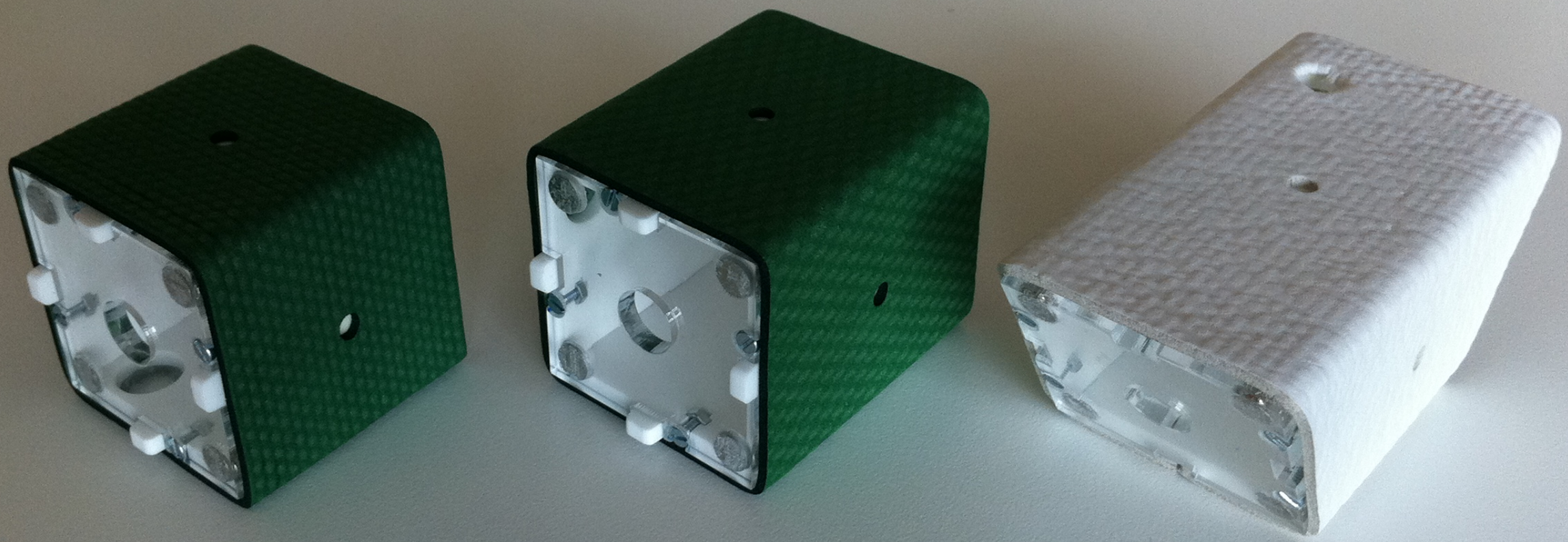


Goals

Playful
Explorative
Physical



Blocks



Stethoscope

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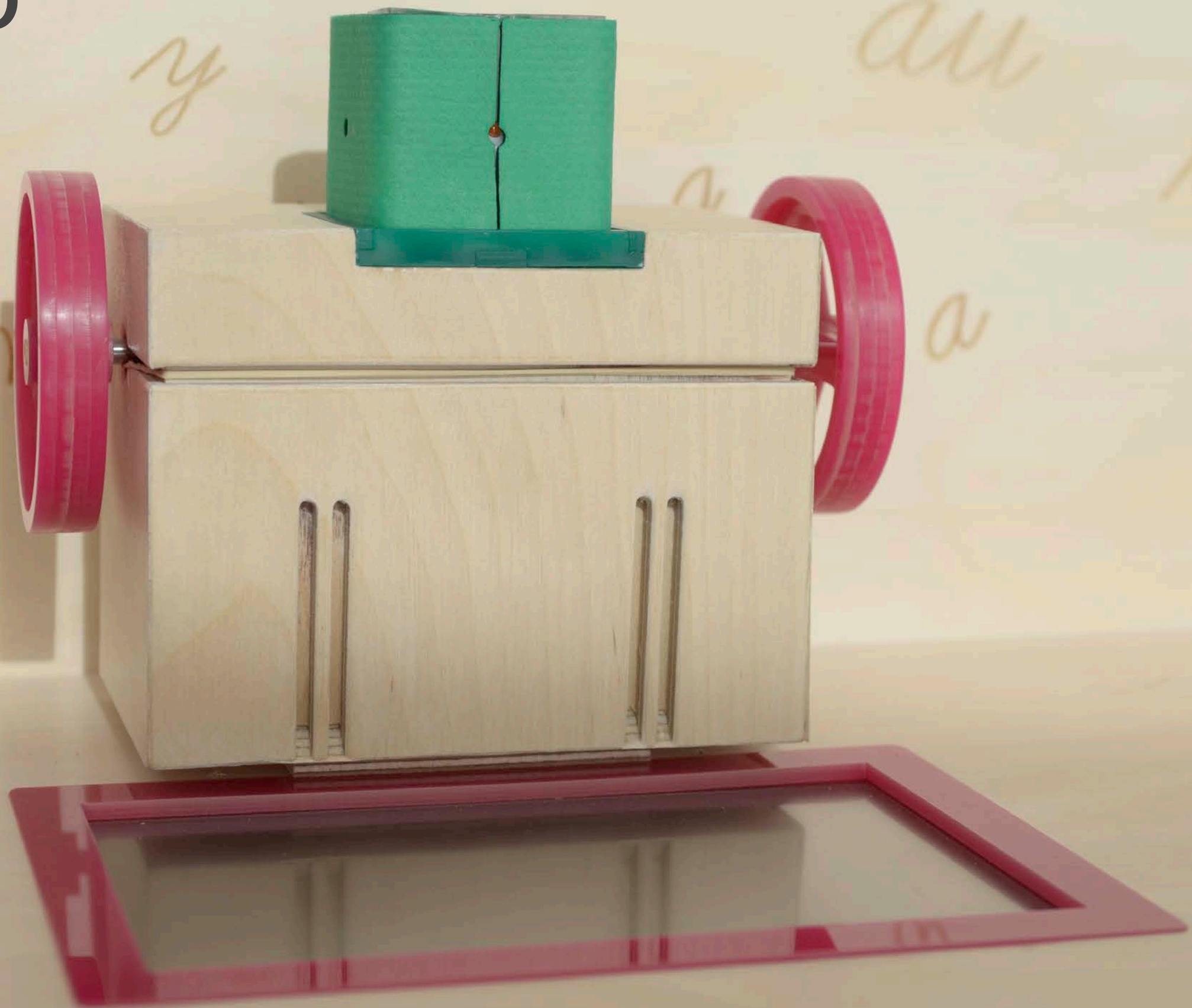
Phonemic Awareness

V – I – S

Headphones

Radio



Touchpad

Wordbutton

Chimney

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Observations

1.) Embedded research and users as designers methodologies provide valuable insights in the process through which pupils engage with playful learning situations

a.) Impact studies

2.) Applied research agents play a key role in transferring fundamental research to meaningful innovations

a.) Learn about each others contexts

Follow-up

1.) Master classes

2.) From tactile playful interaction to gesture based playful learning

Embodied Learning

Human cognition is embodied cognition.

Cognitive processes are deeply rooted and come from the body's interactions with its physical environment

(Deirdre Wilson, 2002)

Photo: 'funky Forrest', Theodore Watson