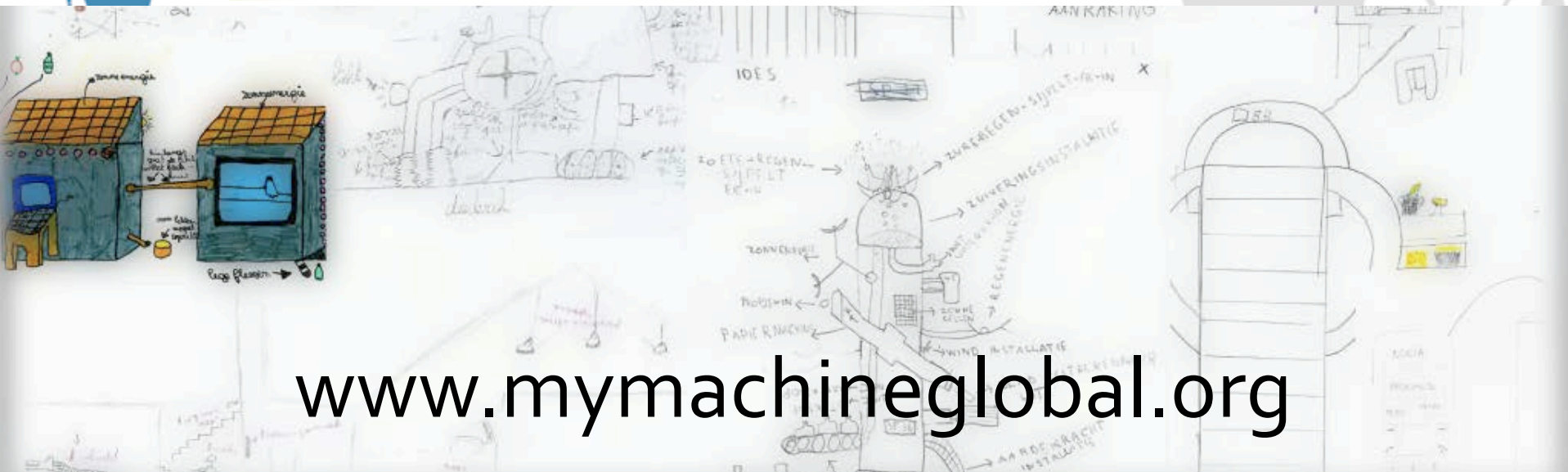


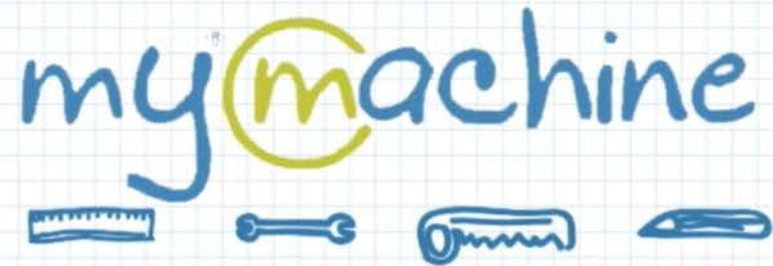
small dreams, big ideas

my<sup>o</sup>machine



[www.mymachineglobal.org](http://www.mymachineglobal.org)

# MOVIE 1: Imagine



[www.mymachineglobal.org](http://www.mymachineglobal.org)





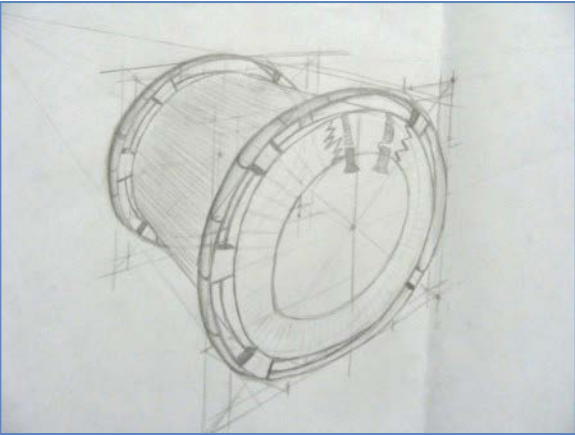
# SPOCKER

the-chase-away-the-ghosts-from-under-my-bed-machine





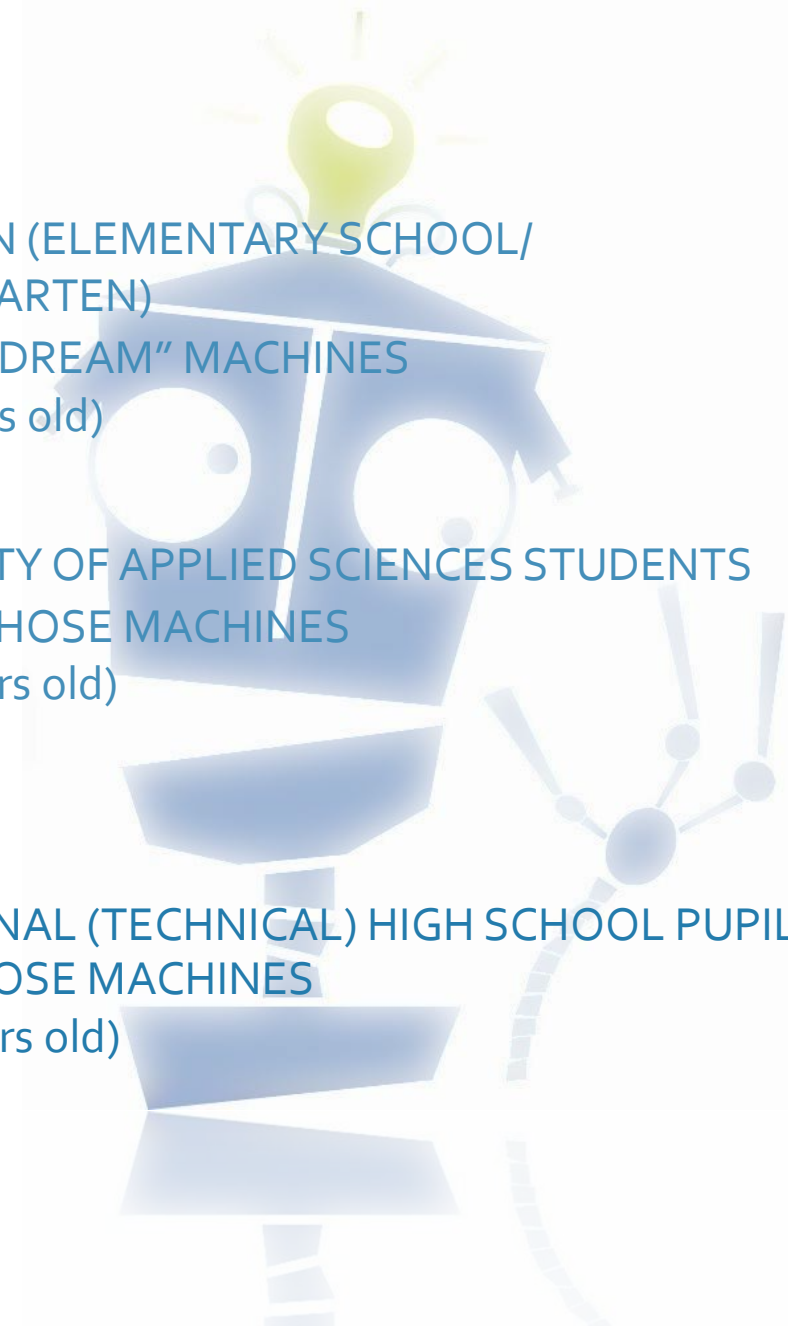
**1** CHILDREN (ELEMENTARY SCHOOL/  
KINDERGARTEN)  
**INVENT** "DREAM" MACHINES  
(6-12 years old)



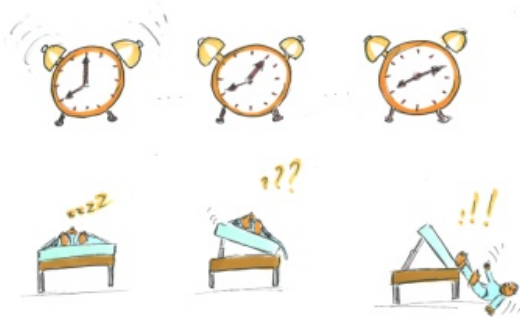
**2** UNIVERSITY OF APPLIED SCIENCES STUDENTS  
**DESIGN** THOSE MACHINES  
(18-22 years old)



**3** VOCATIONAL (TECHNICAL) HIGH SCHOOL PUPILS  
**MAKE** THOSE MACHINES  
(12-18 years old)







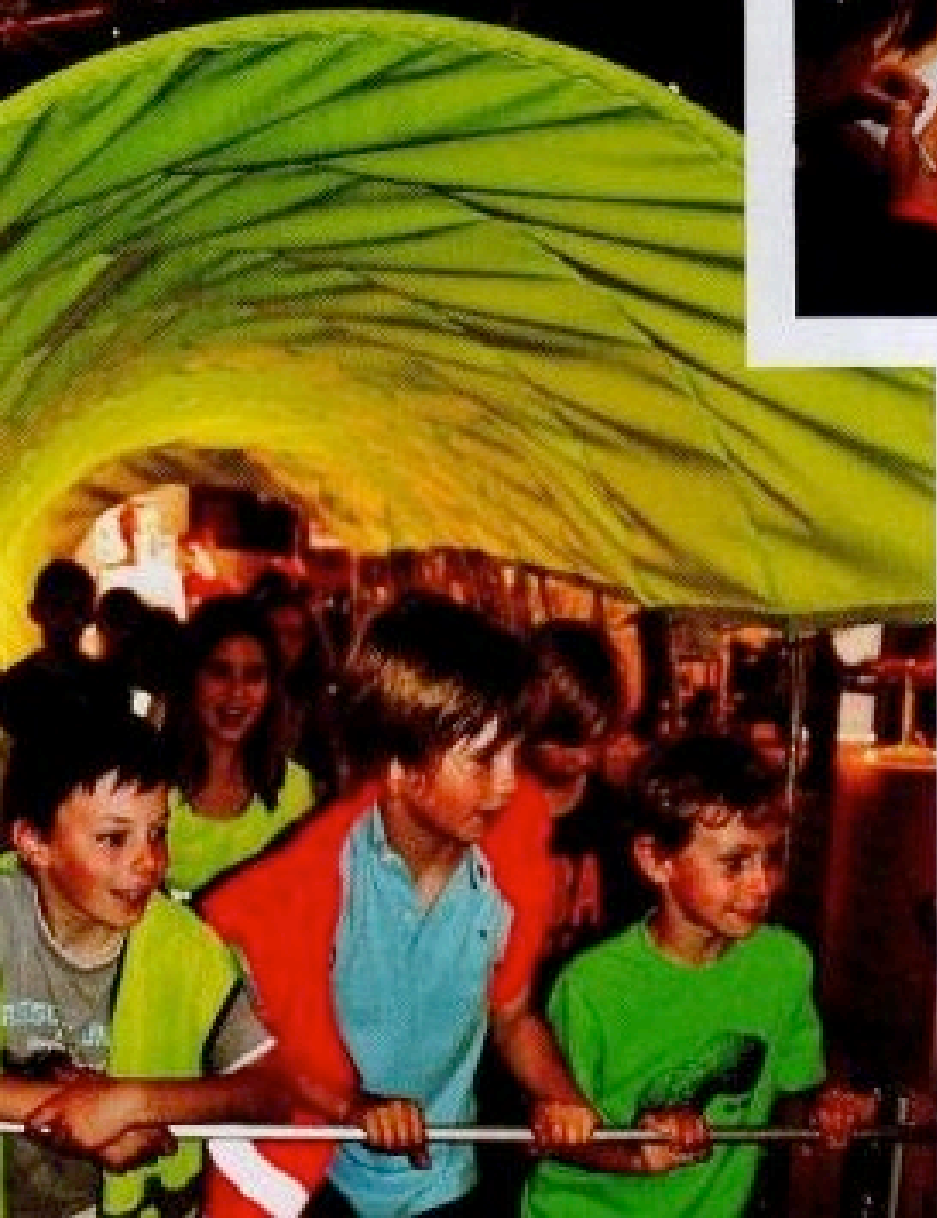
x 3.712



x 663



x 451

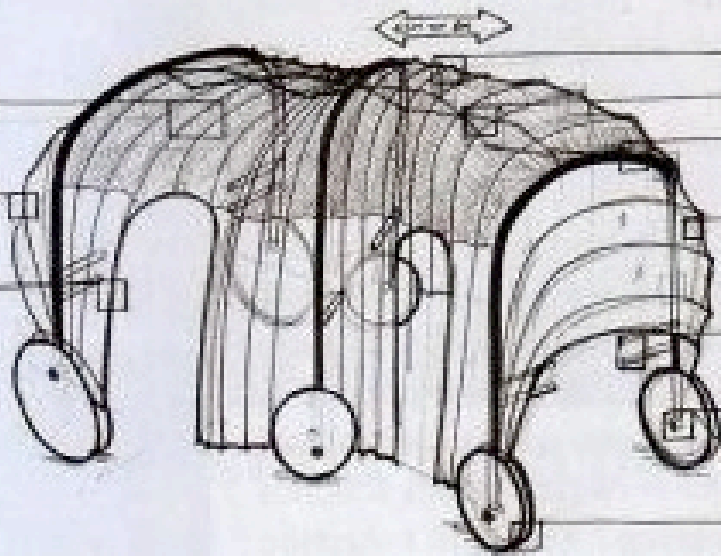


2

PLAN

100 cm (39 in) diameter  
100 cm (39 in) diameter

100 cm (39 in) diameter  
100 cm (39 in) diameter









## MOVIE 2: The Turning Bunk Bed









**MyMachine = Open Education**  
*scenius* = an ecology of talent





**MyMachine = STE(A)M**

**Science. Technology. Engineering. (Arts). Mathematics.**





**MyMachine = Entrepreneurship**  
change agents looking for additionality





**MyMachine = Creativity**



# DINOZAVER NA DALJINCA, KI POBIRA IGRAČE

OPINA PIKAPOLONICE  
EC IDRJA, ENOTA GODOVČ  
AKI GIMNAZIJE JURJA  
GE V IDRJI  
UDENTI POSLOVNO-TEHNIŠKE  
AKULTETE UNG  
TUDENTI VIŠKE ŠOLE ZA  
UMETNOST @ UNG

ŠOLA SLOVENSKE STRICE  
DINOZAVER NA DALJINCA, KI POBIRA IGRAČE  
Blažič, Poljanec igrača, igrača, igrača  
OPROSTITE IZ SKUPINE POLJANEC  
VITKO ŠTARČA, ENOTA GODOVČ



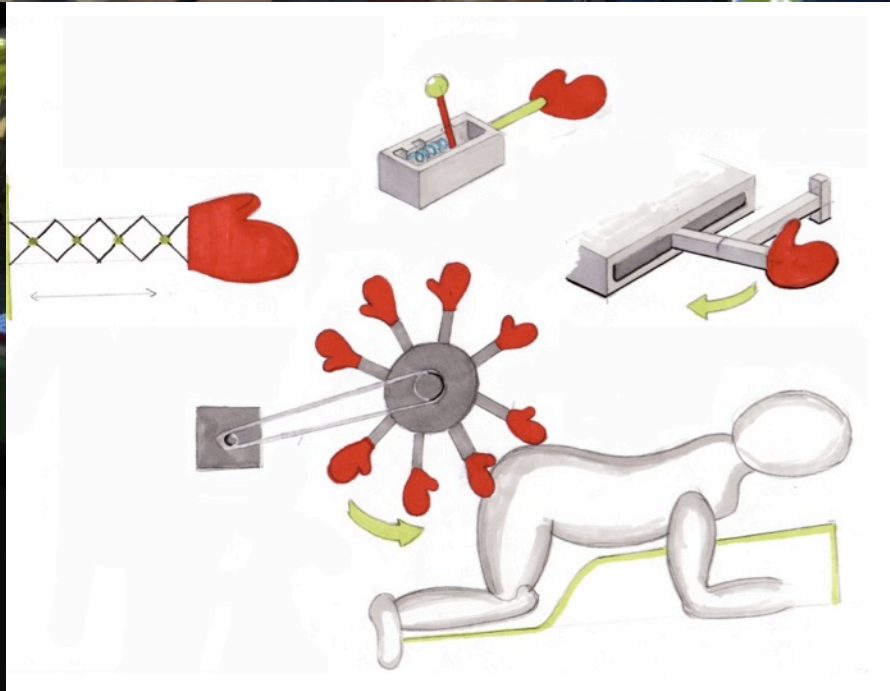
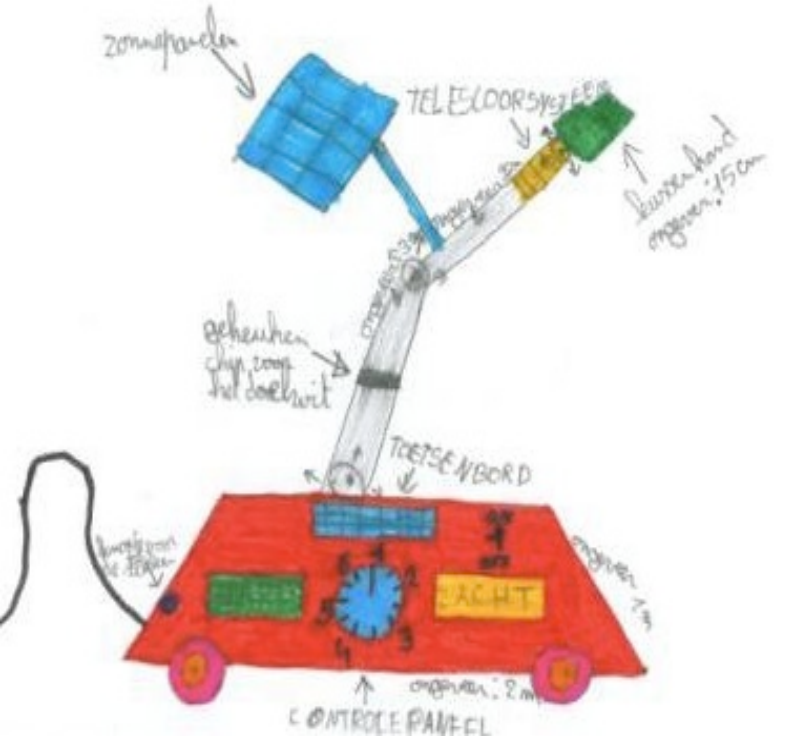
**MyMachine = Fun**

# MOVIE 3: The French Belgian Fries Shooting Machine

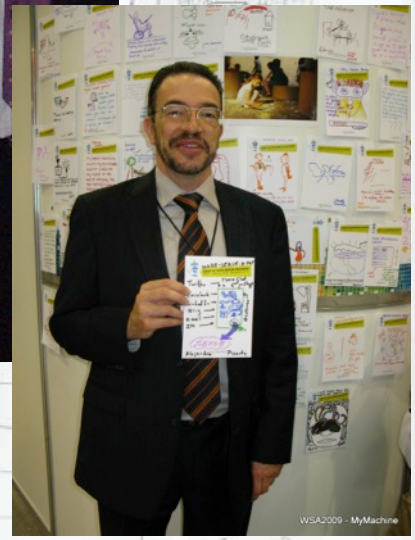
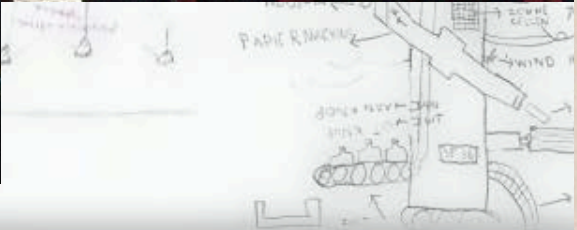
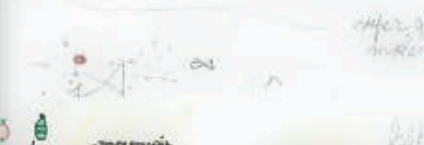
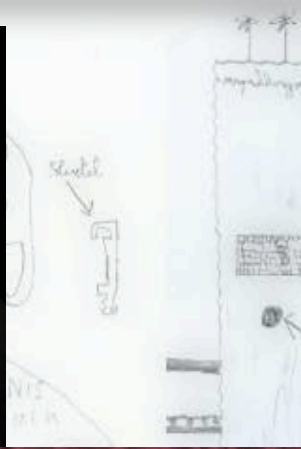
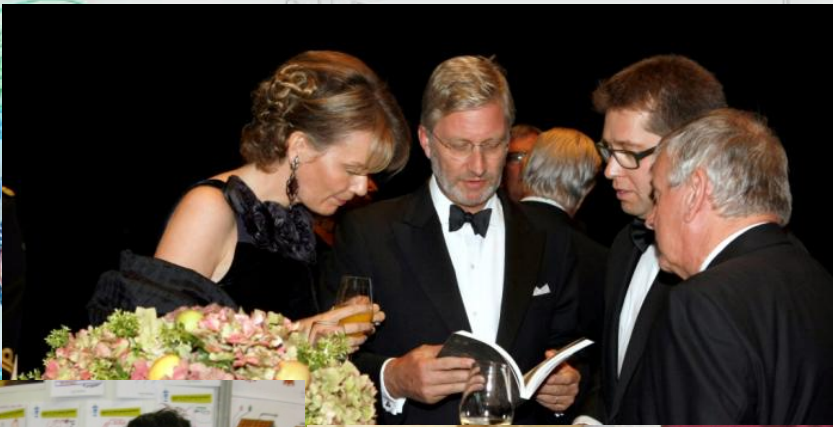




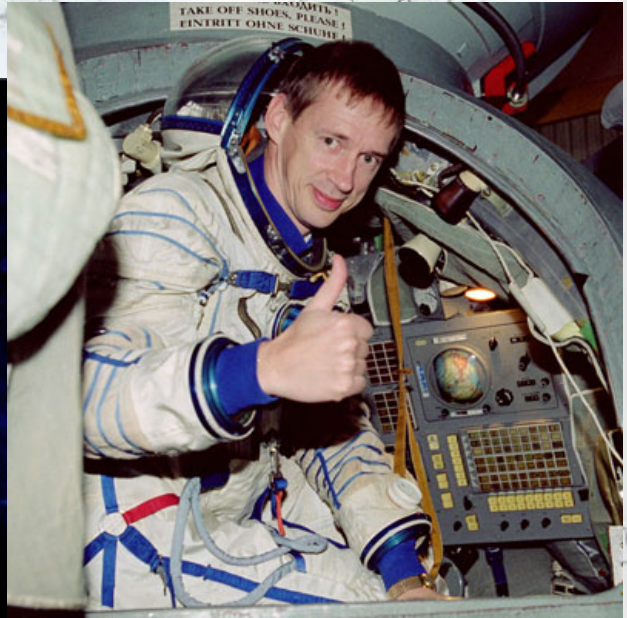
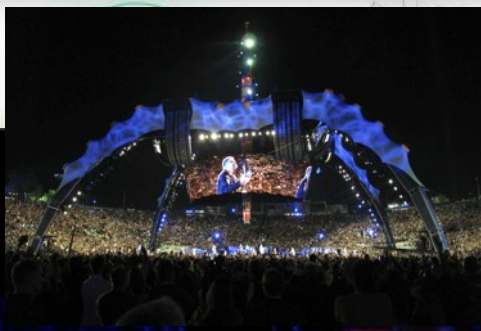




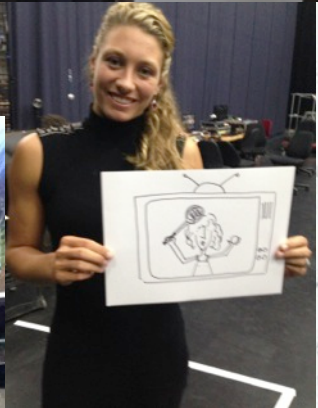
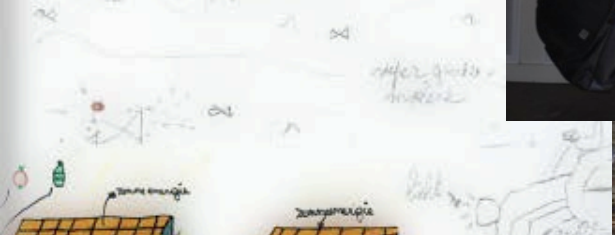
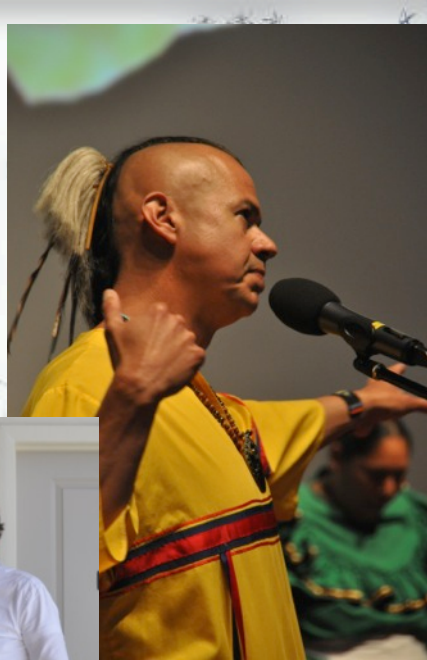




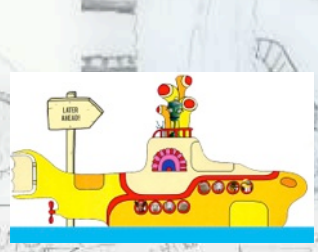
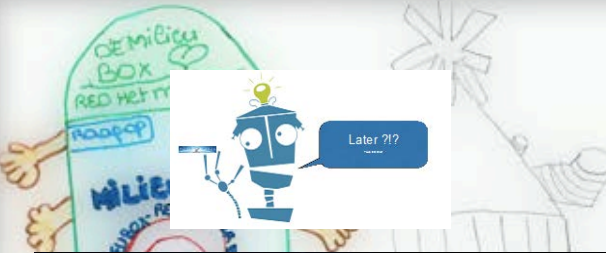
















# my<sup>o</sup>machine

THE GLOBAL MYMACHINE NETWORK - FOSTERING CREATIVITY IN EDUCATION

- Home
- What we do
- MyMachine in the world
- Get Involved
- Acknowledgements and awards
- About
- Contact







Kamer van Koophandel West-Vlaanderen



**DME AWARD** DESIGN MANAGEMENT EUROPE





# Dinozaver za igrače in raketni avto

V belgijskem Kortrijkju neprofitna fundacija *My Machine* že sedem let povezuje vrtnice, šole, univerze in podjetja v uresničevanje izumov otrok. Slovenija se je projektu pridružila lani in temu med prvimi idrijski vrtnici in osnovne šole. Za izdelavo sta že izbrana dva sanjska stroja tukajšnjih otrok.

**LJUBLJANA, IDRIJA** ▶ Povezava vseh ravni izobraževanja in industrije za uresničevanje idej najmlajših izumiteljev ima v Belgiji odlične rezultate. Pobudnikom fundacije - skladu skupnosti Zahodne Flandrije in Univerzi za uporabne znanosti - je v sedmih letih uspelo povečati usvajalnost v izobraževanju. Tega se nadejajo tudi slovenski partnerji, med njimi Institut Jožef Stefan, ki si na podoben način prizadevajo zdriniti slovensko šolstvo.

Ob ljubljanskih šolah so se projektu med prvimi pridružili idrijski vrtnici in vse osnovne šole iz občine. Ustvarili so množico risbic z idejami sanjskih strojev. Študentje in dijaki pa so za uresničitev doslej izbrali štiri. Ljubljanski otroci bodo tako dobili napravo za pisanje pravljic po tleh in žogo, ki se bo ustavila sama, ko jo boš prijel, s pomočjo tamkajšnjih gimnazijcev in študentov.

Sanjska stroja bosta izdelana do konca šolskega leta v sodelovanju s pobudniki. Nosilci projekta bodo prve sanjske stroje tudi razstavili in pospremiti za oceno projekta. **SD**

## Sadike na dan zmage

**NOVA GORICA** ▶ Inicijativa Podružnica tudi to soboto vabi na izmenjavo semen in sadik. Pobudo, ki je med meščani že naletela na navdušen odziv, bo tokrat gostil

Community Foundation (WCCF) as ander belangrike rospellers.

Jeremy Maarman van die WCCF het tydens 'n besoek aan Roemenië, in kontak gekom met die My Machine-projek in België en na onderhandelinge is die ooreenkoms beklink om 'n My Machine-span na Suid-Afrika te bring.

Aagje Beirens, die projekbestuurder van My Machine: België, het Maandag verduidelik dat die 30 top-wetenskapleiders van Laerskool Swartland saam sal besluit oor watter masjien hulle gebou wil hê voordat studente van CPUT (Cape Peninsula University of Technology) dit saam met haar spanlede sal bou.

om selfs 'n Airbus mee te ontwerp. "Dit is nou die begin van die nuwe universiteitsjaar in België," het sy verduidelik. "Ons dink dat studente in Suic eksamen skryf nie, dus s en ander besoekende CF grootliks die bouwerk d

Die Laerskool Swartla sal later CPUT se tegnolo soek om die vordering v te ondersoek en op 30 N die masjien by die skool

Die uitvoerende hoof

# Eno

Nedavna pote direktorici ta dal soglasja z odmeva. Last treba zdaj, ko dobro zastavi ekipo, ki je tu zavoda kot u

**DOBROVO** : rim, da našim politične odloč je avdesa mag presentita." I zabaviča Vera Miran Klanjš solastnico bo tin v Smartne lentičnik pri ponudnikoz zmogljivosti bitanju prve briskega zav za prihodnji ni vprašal za zdajšnje di Suhadolnik Venko in m ZOI turizez Breg." t tinčičeva, pred dne



# Kam izpuzjalnost ob vstopu v osnovno šolo?

Vprašalnik Ljubjanopolisa: S koordinatorko projekta MyMachine o inovativnih otrocih, sanjskih strojih in dinozavru, ki pospravlja igrače.

Maja Čakanč, Delo.si  
tor, 09.06.2015, 14:00

**Ključne besede:** ▶ Vprašalnik Ljubjanopolisa, ▶ Mihajela Črnko, ▶ MyMachine



Na fotografiji je Mihajela Črnko. V ozadju sta študenta Štrojne fakultete v Ljubljani Martin Bem in Luka Ambrožič, ki sta izdelala žogo, ki ne neha skakati (dijaki so tokrat sodelovali v začasnih fazah, dejansko izdelavo pa sta v večji meri prevzela študenta). Foto: Uroš Hočevar/Delo

Ljubljana – Kaj sploh je MyMachine, nad katerim pri nas bedi Mihajela Črnko z Inštituta Jožef Stefan? Najlažje je ponazoriti takole: otroci iz skupine Pikapolonice so si zamislili, da bi dinozaver na daljina pobiral igrače, in zdaj idejo uresničujejo. Dobra novica za starše, a bržkone še boljša za otroke.

Kar si otroci zamislijo in narišejo, študenti načrtujejo in dijaki uresničijo. Je tako preprosto?

Ko si v projekt vpet in ga gledaš od znotraj, se pokaže paradoks. Ideja je lahko preprosta, a upoštevat ji treba veliko dejavnikov: najprej poskularno upoštevat čim več želja solorcev, pri načrtovanju pazimo na tehnične zmožnosti dijakov, razmišljamo, katero podjeteje bi prosili za podporo, in ko je načrt izdelan, lahko otrok tudi zavrne izvedbo.

Ampak z res dobrim razlogom?

Zadostuje, da ni tako, ko si je zamislil, da barva ni prava ... Izobraževalnega procesa od vrtnice do univerze se lotevamo holistično. Otrok je naročnik, študent projektni vodja, dijaki pa izvajalci.

Kdo so tisti spretni diplomati, ki vse povežejo?

To je moj izziv. Najprej steče komunikacija med menoj in profesorji, ki so se zavzeli za projekt na svoji šoli. Potem detaja, kot veš in znaš. Sebe po več mesecih smo, recimo, ugotovili, da je spletna pošta za dijake stvar preteklosti, zato smo odprli facebook skupine. Se pa želijo dijaki in študenti čimvečkrat tudi osebno srečati, da se poistovetijo z idejo in do iskrene želje šestletnika dobijo občutek dolžnosti. Izziv je torej, kako organizirati občutek dolžnosti, da se med vsemi iskri od inovativnosti.

Najbrž tudi doseči, da ste vsi na isti valovni

# ade Educação

que Tecnológico de Óbidos tem parceria do IP Leiria

# Machine constrói máquina dos sonhos das crianças

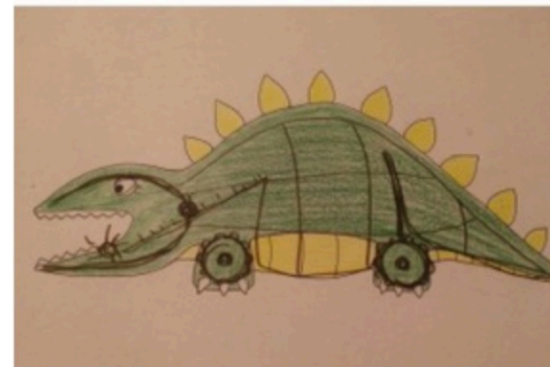
MUNICÍPIO DE ÓBIDOS

**Bélgica é o berço do projeto nasceu**

## BOSTA URESNIČENA

neverjetne stvaritve se je ni bilo nikogar, ki bi vam oja otrok z Idrijskega pa

za Idrija, enota Godovič, oja dinozavra na daljinca, oja učenca 3. razreda avto na raketni pogon. etošnjega šolskega leta t obeh sanjskih strojev v erze v Novi Gorici, z i Gimnazije Jurija Vege a risali učenci in vseh Spodnji Idriji in Črnem



uresničitev izbrani v okviru mednarodne pobude MyMachine, s sedežem v Kortrijkju in skladu skupnosti Zahodne Flandrije in univerza za uporabne znanosti HOWEST. Projekt se izvaja že od leta 2008, v Sloveniji pa smo se ji pridružili v začetku leta 2015. Usvajalnost v izobraževanju, in sicer tako, da se preko povezovanja vseh stopnic izumiteljskega resničitev idej otrok – izdelava njihovih sanjskih strojev.

uma turma, as crianças deslocaram-se, "As crianças de 5/6 anos têm uma cente.



A hand-drawn sign on a corkboard. The sign is rectangular and dark grey. It features the text 'OTROŠKI SANJSKI STROJ' in large, bold, sans-serif letters. The top row contains 'OTROŠKI' in blue. The middle row contains 'SANJSKI' in green. The bottom row contains 'STROJ' in blue. Each letter is secured to the corkboard with small white pushpins. The sign is hanging from a dark wooden branch by two green strings. The background is a blurred indoor setting with a window and some papers on a wall.

**MyMachine = goes a deeper level**





# MyMachine

Product AND Digital design AND ...







**Innovation Awards** ★





# Wereldmachine

Is gemaakt van:

papier, ~~en~~ computer schermen

er kan ook rechties  
worden geschreven die je  
kun opstaan op het kaart

geluidsonhanger

## MyMachine

new MyMachine adventures in other regions  
via franchising

opkleefbaar  
↓ kaart

zolang als je wilt



ANTARCTICA

zolang als je wilt

scherm

kan hem het  
geheel uit

digitale  
wereldkaart

loetsen als je iets zegt  
loerd begint die plaats (land)  
te flinkeren... als je er dan op duikt heeft hij een kaart met alle wegen van die



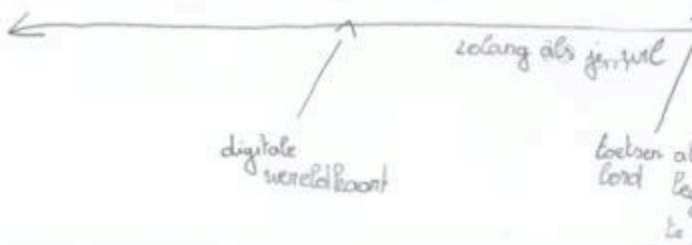
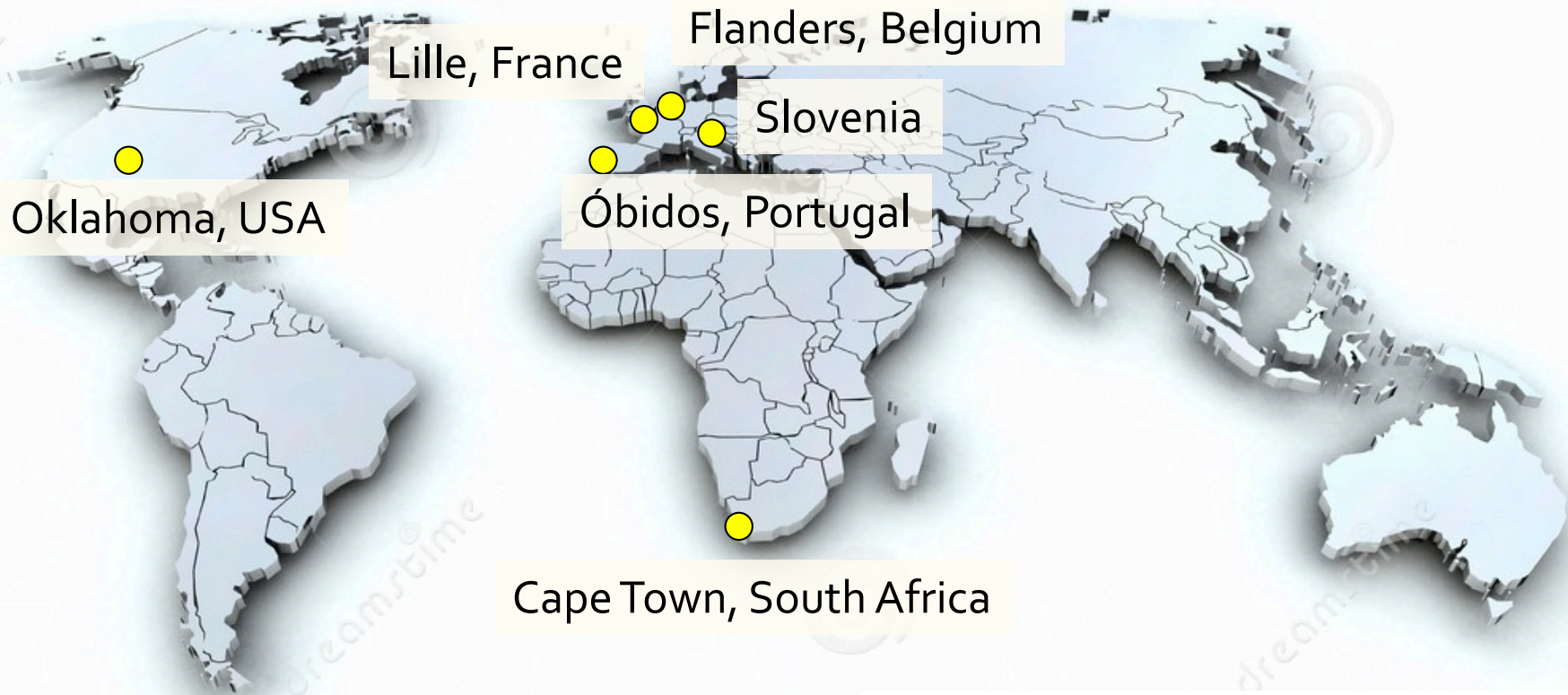
# Wereldmachine

Is gemaakt van:

er kan ook rechtjes  
worden geschreven die je  
kunt opklaar opok kaart.

geldenhangen

papier, ~~en~~ computer schermen








my<sup>®</sup>machine  
CAPE TOWN



my@machine  
SLOVENIA







**4.826** Pupils and Students  
**433** Teachers and Professors  
**2.914** Ideas and Products  
**153** Media coverages  
**6** MyMachine Books  
**39** Presentations worldwide, reaching  
**23.878** People  
**Many, many** Meetings  
**Countless** Smiles and Sometimes Tears  
**1 year** MyMachine Global  
**3** continents  
**3** Very happy, dreaming co-founders





my<sup>®</sup>@machine

is created and owned by



university of  
applied sciences



inter-municipal  
association



community foundation

Ken Robinson:

# Do schools kill creativity?

TED2006 · 19:24 · Filmed Feb 2006  
Subtitles available in 59 languages

View interactive transcript



Favorite



Download

Share this idea



34,764,720 Total views

Share this talk and track your influence!



my@machine







Join our Facebook Page and the worldwide MyMachine community







**Piet Grymonprez**  
**piet@mymachineglobal.org**

**www.mymachineglobal.org**

MyMachine is a registered trademark owned by the MyMachine Foundation



# MyMachine Slovenia

Mihajela Črnko, Institut Jožef Stefan



# MyMachine Slovenia Pilot Year Results in Numbers

Establishment of the MyMachine Slovenia franchise: April 2014

- Participating educational institutions: 14
- Children, pupils, students: 157
- Teachers: 13
- Ideas: 120
- Concepts: 7
- Realized machines: 4
- One national event
- 15 articles and interviews in national print, online and radio media
- Mobilization of 20 new schools and new companies that are joining in academic year 2015/2016





# Our experience so far in introducing creative thinking to the (open) curriculum

Creative thinking is not an innate talent of just a few individuals, and it is not confined to the arts. It is a process integral to human intelligence, that can be practised, encouraged, and developed within any context.

## Breaking down creative thinking into 4 competencies

(Epstein's Generativity Theory):

- **Broadening**
- **Challenging**
- **Surrounding**
- **Capturing**



## Broadening

### Example: Machine-that-writes-Fairytales-on-the-Ground

The more diverse one's knowledge and skills, the more varied and interesting the possible novel patterns and combinations that might emerge. To be creative one must broaden one's knowledge by acquiring information and skills outside one's current domains of study and expertise.

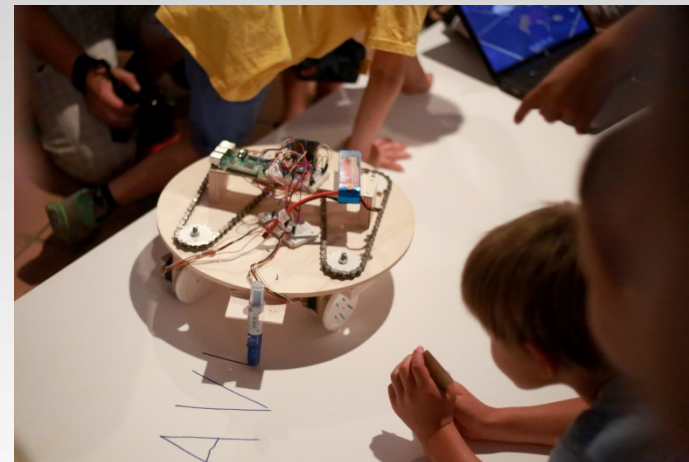




# The-Fairytale-Writing-Machine

NEKOČ JE ŽIVELA DEKLICA,  
ŠLA SELA HOBOTNICA V  
VF ŽIVELA HOBOTNICA V  
JE SPIKILA V TREBUHU  
POTE MJOJE ZELO BOLELO.  
PRIŠLASTA NJENA STARSA.

STROJ KI NA TLA PIŠE PRIL  
NISTVO UN U  
MASA



## Challenging

### Example: Dinosaur-That-Picks-Up-Toys

Novelty emerges from situations where existing strategies and behaviours are ineffective. The more difficult the challenge, the more likely a creative, novel solution will emerge.





# The-Dinosaur-That-Picks-up-Toys



## Surrounding

### Example: The-Electro-Magnetic-Rocket-Car

Exposure to multiple, ambiguous situations and stimuli create environments where novel strategies and behaviours may emerge – for example, looking at things in new ways, interacting with new people, and considering multiple sensory representations.





# Electro-Magnetic-Rocket-Car



## Capturing

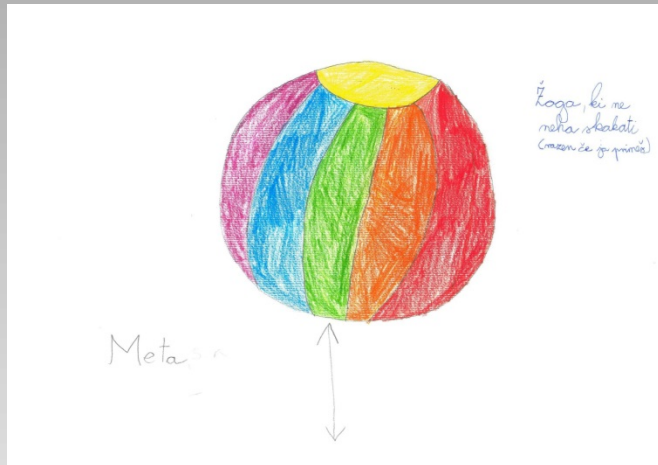
### Example: The-Ball-That-Never-Stops-Bouncing

Novelty is occurring all the time, but most of it passes without recognition. Creativity requires attention to and recording of novelty as it occurs.





# The-Ball-That-Never-Stops-Bouncing



# Challenges

- Uncertainties in coordination and participation in a creative process demand flexibility
- Enabling inclusiveness and collaboration of all in the education system
- Attracting and motivating industry partners as supporters and mentors
- Establishment of an effective communication in an intergenerational and interdisciplinary collaboration
- Motivating without limiting
- Can the pupils and student be too ambitious?
- Limiting the number of realized dream machines
- Having the right amount of teacher, mentor or industry intervention without limiting the creativity or minimizing the impact of learning experiences of the collaborating children, pupils and students





# Future Goals

- Creating a methodology adapted for the implementation of the MyMachine methodology in the Slovenian educational system
- Maximizing the direct (50 participants including teachers and industry) and indirect impact
- Measuring the effect of participation in MyMachine by creating the effect measuring tool

National level

International level

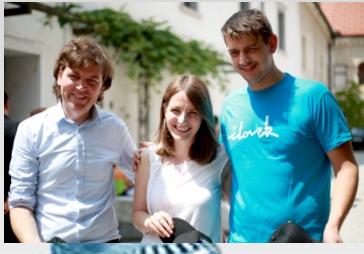
- International collaborations: The BelSlo Experiment
- Experimenting on national level

- MyMachine becoming an integral part of the Slovenian education system

- The Dream goal of MyMachine Slovenia: „One Dream machine per one real child“



# Final exhibition opening, MAO 11. 6. 2015





# Thank you for your attention!

Visit us at:

[mymachine.si](http://mymachine.si)

[mymachineglobal.org](http://mymachineglobal.org)



[mihajela.crnko@ijs.si](mailto:mihajela.crnko@ijs.si)

**my<sup>®</sup>machine**  
SLOVENIA