



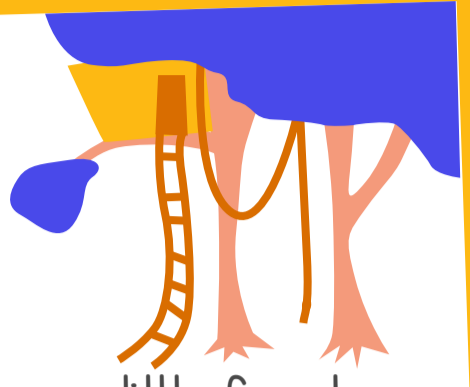
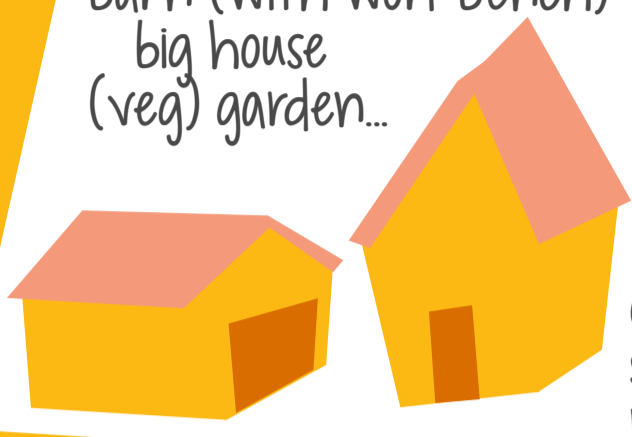
free range kid

Makers Yeah sure! but how? make makers!

When my brothers and I were born, our parents moved away from the city, looking for space and air.

So I grew up in the countryside in the North of Holland. There I became a free range kid.

barn (with work-bench)
big house
(veg) garden...



our own little forest, self built cabins, rope tracks in the trees

most of all, I am a maker because of my maker-parents

My dear mum was (is?) a feminist and made (and makes!) a lot:

wool, sweaters, the veg. garden clothes, wine, eh

Hey? That's a bit like a weather app? Yeah right! We had that before there was the internet.



Big antennas on our roof!! They're only for the satellite receivers, but the police wouldn't stop detecting. (According to my dad, this was very funny.)



*@deViltmannen know why this was: the wool was thicker than 3 micron. A sheepy sweater is not always itchy. Just pick the extra thin hair.

My dad is an electronics engineer. He used to build everything.

My parents made us into makers.

and every year: a lot of black-berry marmelade



licking out the large pan was the best!

but what if your parents are not like that? or you live in a small house in the city?

so how to become a maker?

And the mess! I can't bear to think about it



Why is this making important anyway? Knowledge has much more value.

hello! by being the living, making example!

Knowledge makes money. I am the living proof!

Making is great. It makes us people happy.

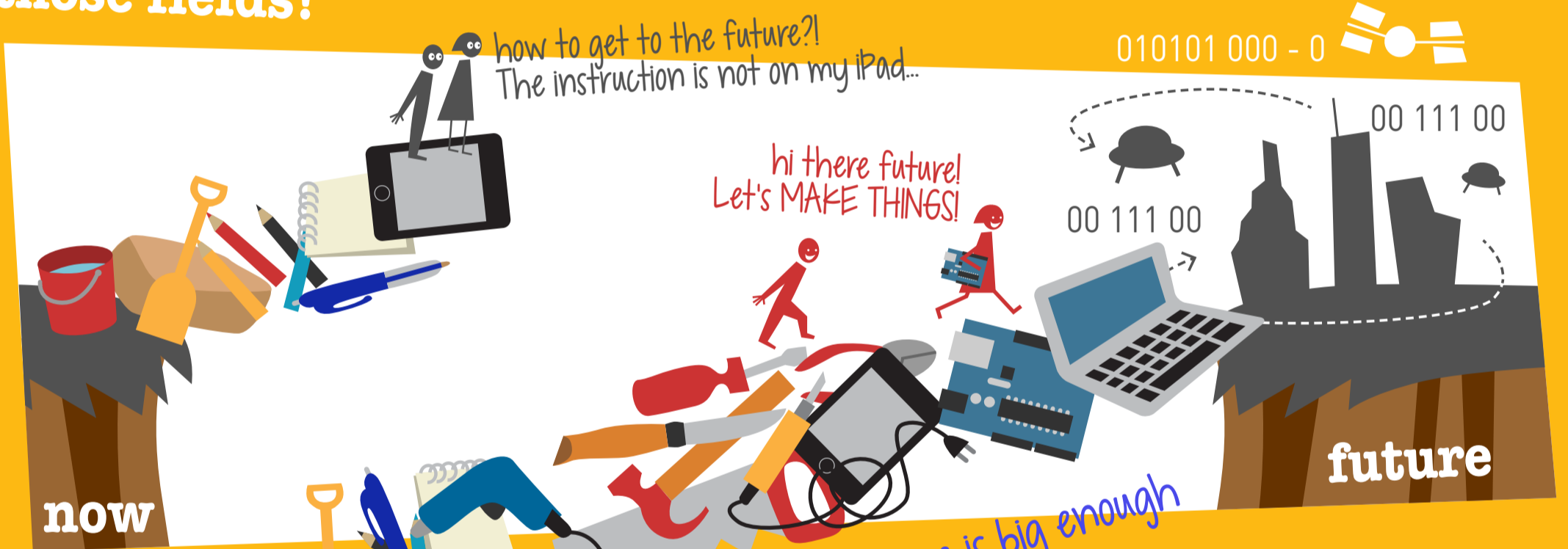


Roman Krznaric calls it 'The art of living'. To imagine, plan and make your own world. (And he doesn't mean making an online purchase.)

Knitting grannies know this :)

But it is also of vital importance:

Having a large knowledge base in different fields makes you more creative. Making is one of those fields!



Only when the knowledge base is big enough can we make the bridge to the future. With this base, (tech) making becomes one of the strategies at hand!

How can we learn this?

Become a Creative Person in two weeks, guaranteed success!

Creative in 3 easy steps!

A lot of happy users!

as seen on TV ;)

Well, no. Definitely not like this.

It's different for everyone

How? Maybe these three ways...



No, these are not learning styles. They're more like starting strategies. And we all use them all. They vary, depending on topic, location, available time, your helpers, everything! And they're all good for making (obviously).

hey? Is this some sort of disclaimer?

People start their making process using these different strategies.

And once they're on it, they switch strategies intuitively and constantly.

Without any difficulty.

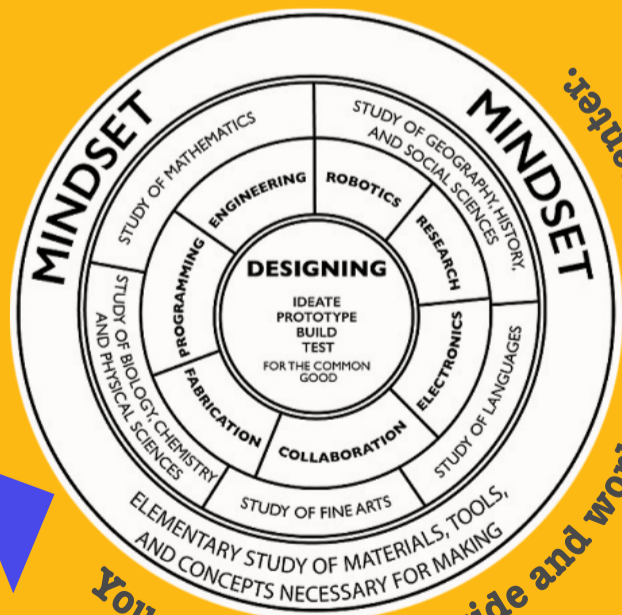
Choosing a strategy is a subconscious and intuitive process.

1 2 3 4 5 done
One method can never serve all

So, how to teach this?

Easy: a big knowledge- and experience base.

I really like Patrick Benfields STEAM model for maker education. (Inspired by Bauhaus.)



You start on the outside and work towards the center.

In his model, the maker-mindset is very important.

This mindset to me:

- to be able to start
- always try
- learning by doing
- learning from and with others
- with all senses
- and a lot of fun!
- being vulnerable
- everything is material
- everything is inspirational
- more?



And be as brave as you can! Always.

He is on Twitter: @McLemoreAve

All children should have their own personal toolbox*

*both literally and figuratively
 it's about being self confident so you feel free while making (crazy) plans
 this toolbox should be very diverse:

All children should have knowledge of- and experience with materials, tools and hardware. But knowing (about) concepts is equally important. They are your thinking tools: To be able to think about what you want to make or achieve and why.



Yes, YOUR toolbox. Makers make makers: teachers must be makers as well! With a hammer and saw, but also the maker of your own maker-education. <3

Hands-on experience, knowledge, love for making and creating and some great ideas!

And (how) does it tie in with all other things children learn?

Can we come up with suggestions for the content of this maker toolbox? What is interesting, exciting and important?

Think of your perfect toolbox!

material	tools and hardware	concepts	concepts
<input type="checkbox"/> clay	<input type="checkbox"/> saw	<input type="checkbox"/> making	<input type="checkbox"/> art based learning
<input type="checkbox"/> pencils	<input type="checkbox"/> knives	<input type="checkbox"/> failing	<input type="checkbox"/> learning
<input type="checkbox"/> paint	<input type="checkbox"/> fire	<input type="checkbox"/> philosophy	<input type="checkbox"/> cooking
<input type="checkbox"/> wood	<input type="checkbox"/> soldering iron	<input type="checkbox"/> sharing	<input type="checkbox"/> design thinking
<input type="checkbox"/> metal	<input type="checkbox"/> oven	<input type="checkbox"/> programming	<input type="checkbox"/> looking
<input type="checkbox"/> foods	<input type="checkbox"/> MakeyMakey	<input type="checkbox"/> ?	<input type="checkbox"/> feeling
<input type="checkbox"/> elec	<input type="checkbox"/> Arduino	<input type="checkbox"/> ?	<input type="checkbox"/> ?
<input type="checkbox"/> plas	<input type="checkbox"/> tablet	<input type="checkbox"/> ?	<input type="checkbox"/> ?
<input type="checkbox"/> ?	<input type="checkbox"/> 3D printer	<input type="checkbox"/> ?	<input type="checkbox"/> ?

core competences? end-terms?

what do you think?
 would you share your lists?

You might think: "Well ok. But didn't some clever person think of this already? Can't I just implement their plans?"

You can, but I don't think you should. Yes, you can read stuff and embrace it as the truth. But isn't it way better to really nurture and grow your own knowledge and insights?

And you share what you've learnt.

So yeah, probably someone made a perfect plan already. And that's great! Check that out and reinvent your own truth. Because tailor made solutions always fit best. Be a maker! Make your (maker) education.

In #mak-ered, nobody is alone! Thank you for your knowledge, inspiration, frantic maker sessions and discussions @arjanvandermeij, @_pi, @mhzalar, @hesteri, @annekefd, @McLemoreAve, @EvanMaikens, @peetsneekes, @smarthinez, @suzedewit and many more.