

# THE ADVENTURES OF JENGINEER

Connecting to people and place through play!



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Enter Player... Scan to Begin







# Acknowledgement of Country





What places, rivers, mountains, plants, animals are you connected to?





# What do you hear? What do you Wonder?



















Environmental Engineering, Nature-Based solutions, Community Co-Designed infrastructure

*What can we learn from Country to address engineering and infrastructure challenges*

*How do we connect with each other and with Country and place?*

Engineering Education: place-based and play-based learning, Indigenous Engineering





Engineer

Scientist

Engineer

Engineer

It's Me!

















Let's get to know  
each other with  
**LEGO®**  
Serious Play®





# How much do you already use LEGO® and LEGO® Serious Play®?

I use Lego in my teaching

I know all about Lego Serious Play

I use Lego Serious Play in teaching

Strongly disagree

Strongly agree





# What is LEGO® Serious Play®

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A method to engage  
people to think  
differently and have  
different conversations!







Google

SAMSUNG



HITACHI



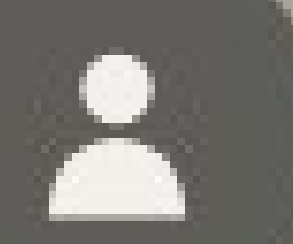
*... and  
more!*



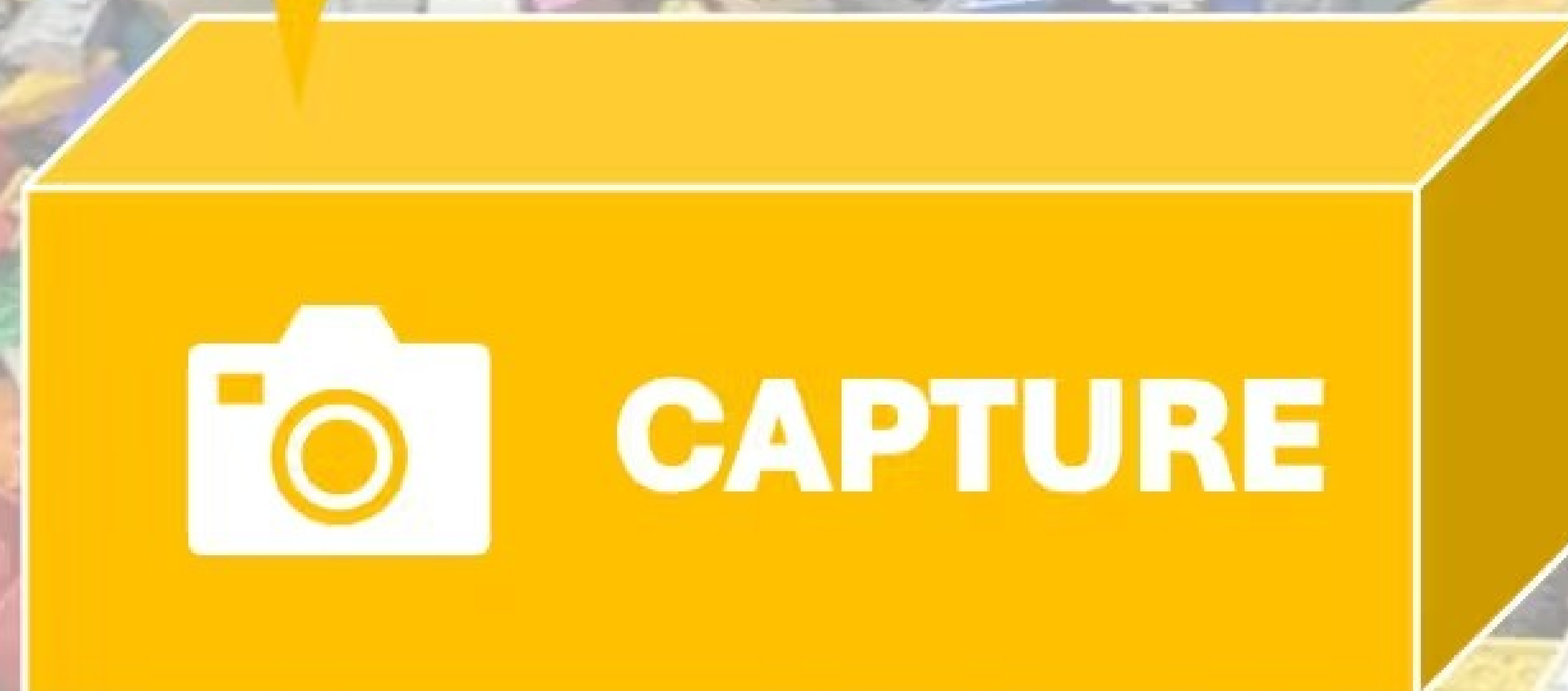


# What is LEGO® Serious Play®

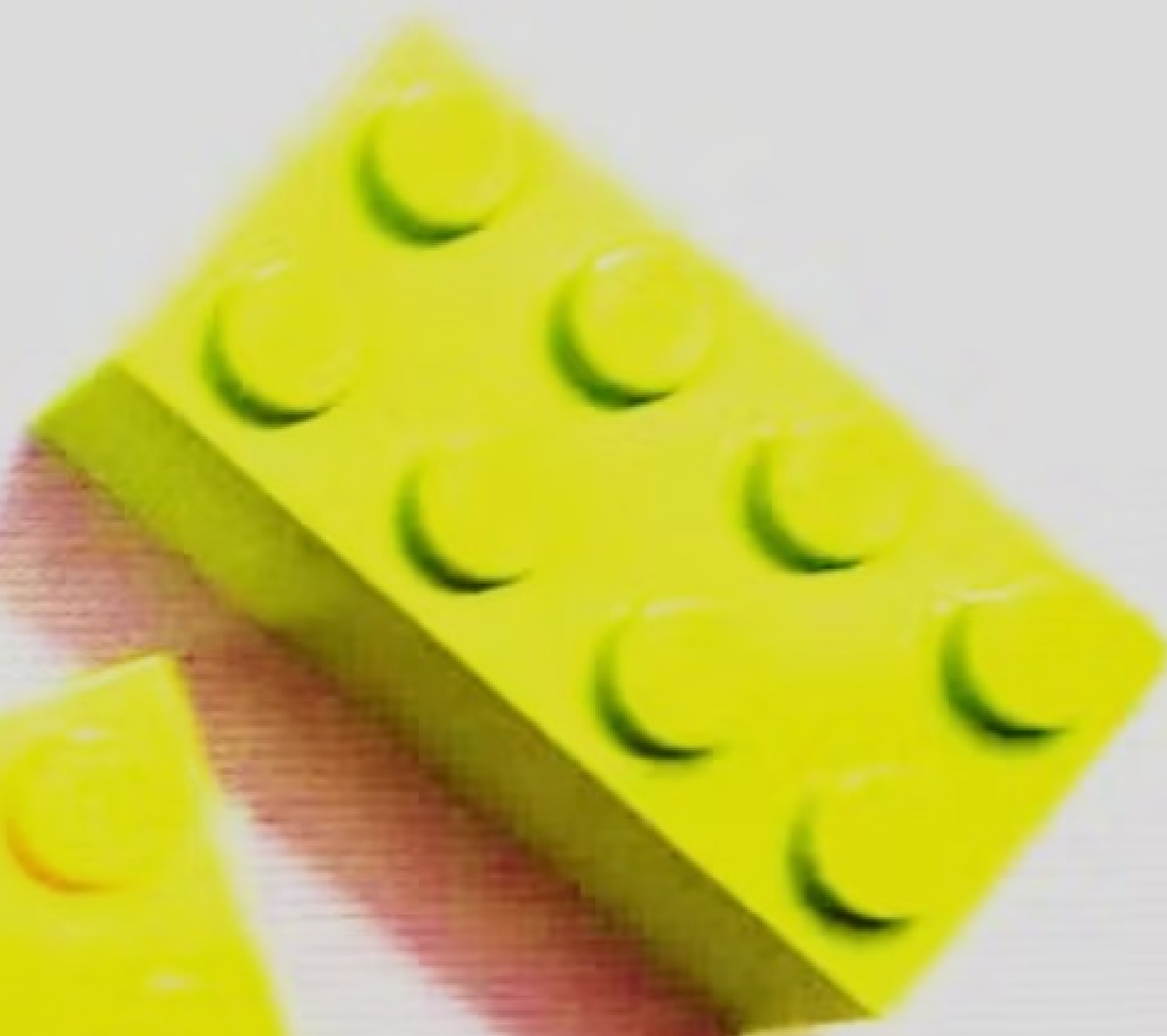
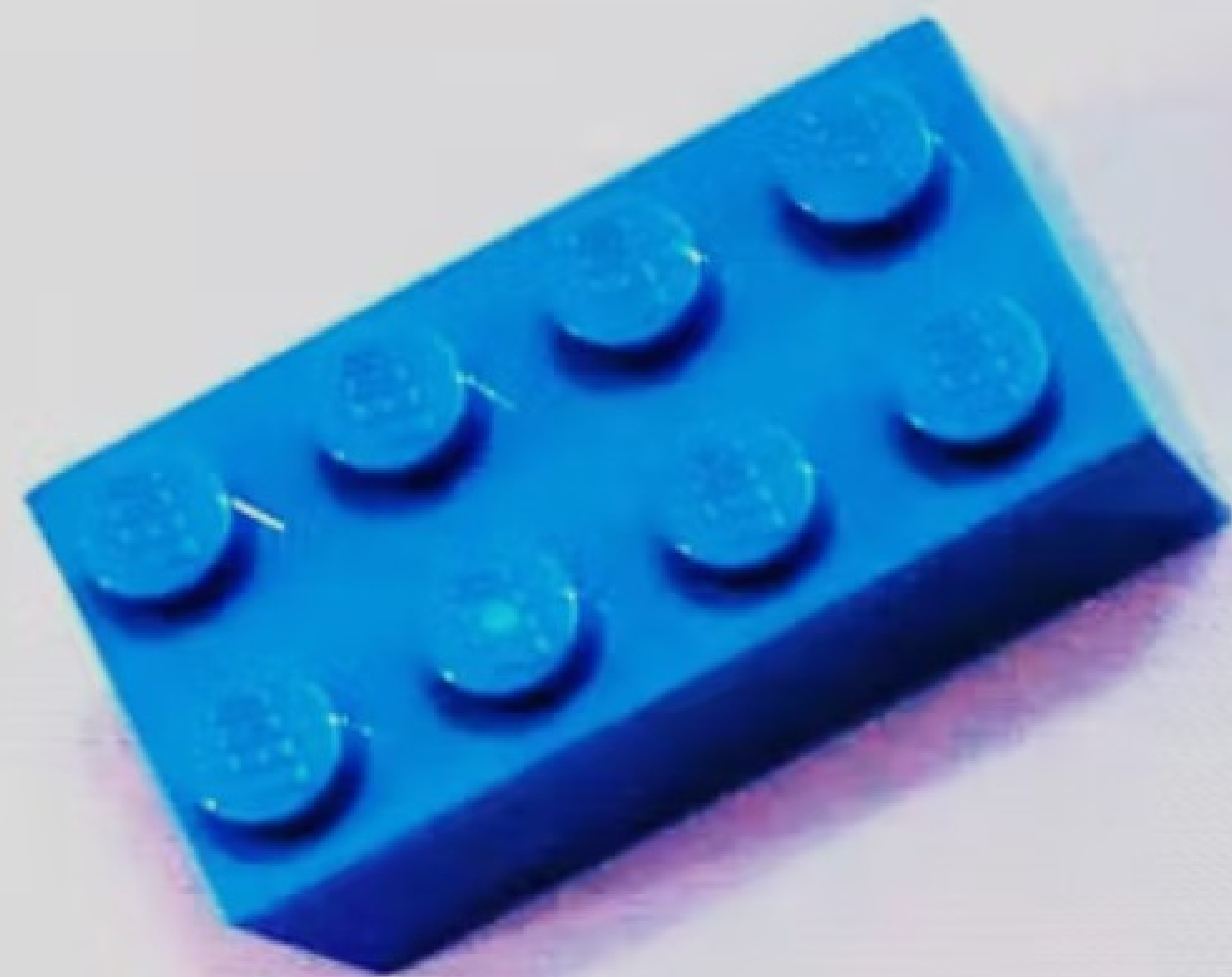
A method to engage  
people to think  
differently and have  
different conversations!













# How many ways can 6 bricks go together?

300

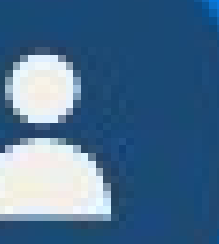




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Durhuus, B. and Eilers, S., (2014), On the entropy of LEGO®. *Journal of Applied Mathematics and Computing*, 45, pp.433-448.

Abrahamsen, M. and Eilers, S., (2011), On the asymptotic enumeration of LEGO structures. *Experimental Mathematics*, 20(2), pp.145-152.





The image shows two cameras on a grey surface. On the left is a custom-built camera made of black and red LEGO Technic bricks. It has a rectangular body with a lens opening on the front and a flash unit on top. A white card with a pixelated red and yellow cross is placed in front of it. On the right is a real Polaroid Sun 635 camera, which is red and black. It has a lens, a flash, and a Polaroid logo. A Polaroid photo of a yellow and orange object is emerging from the bottom. The text "Not trying to recreate a masterpiece" is overlaid in the center in white, with a white underline under the word "masterpiece".

**Not trying to recreate a  
masterpiece**



# Think metaphors and story

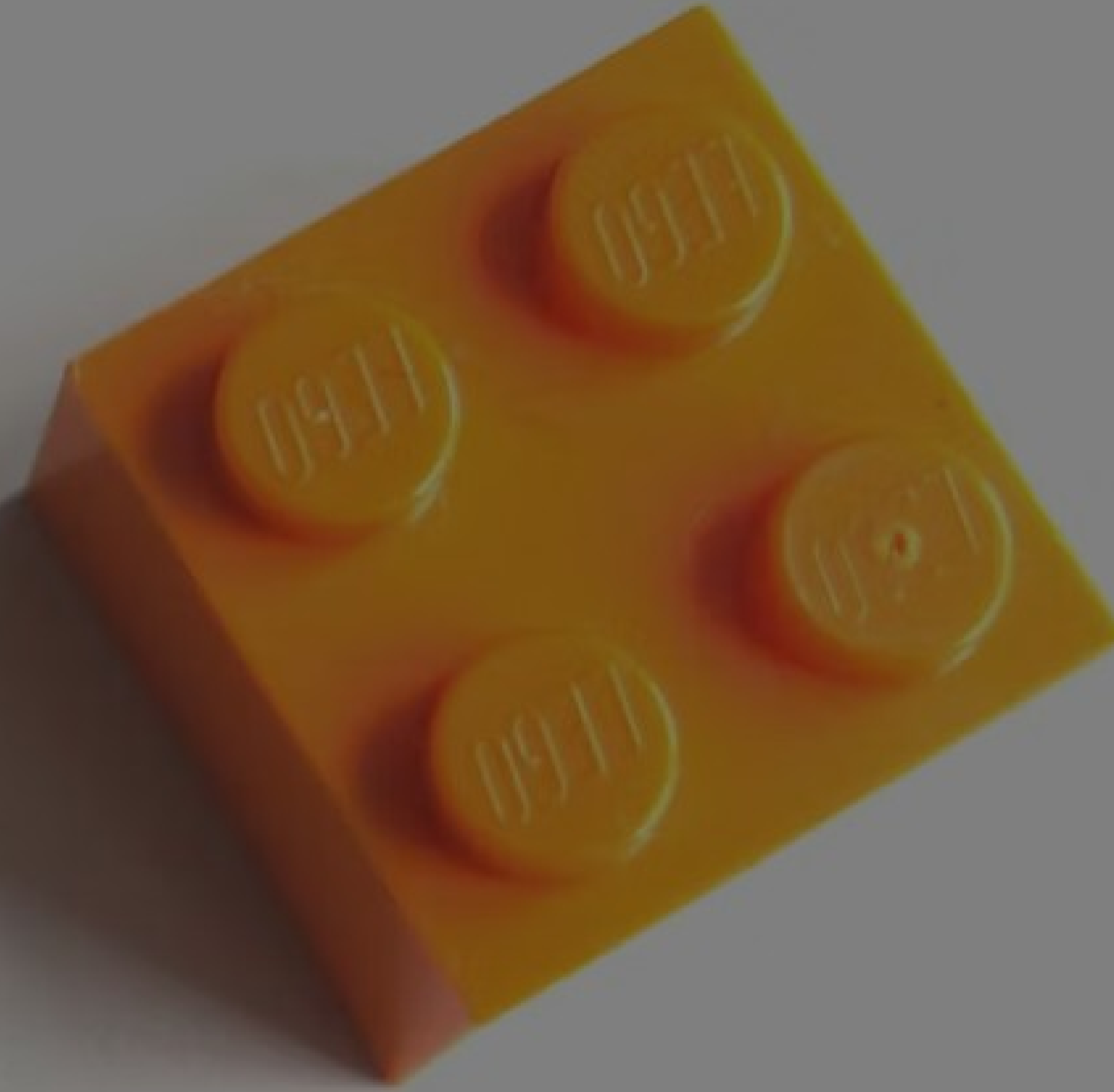


What does this  
piece represent?





# What does this brick represent?

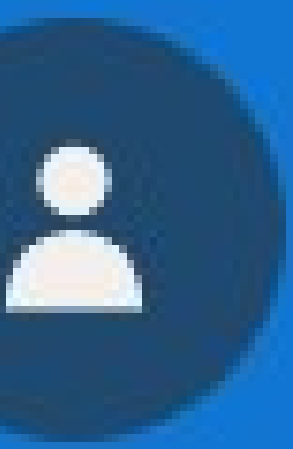




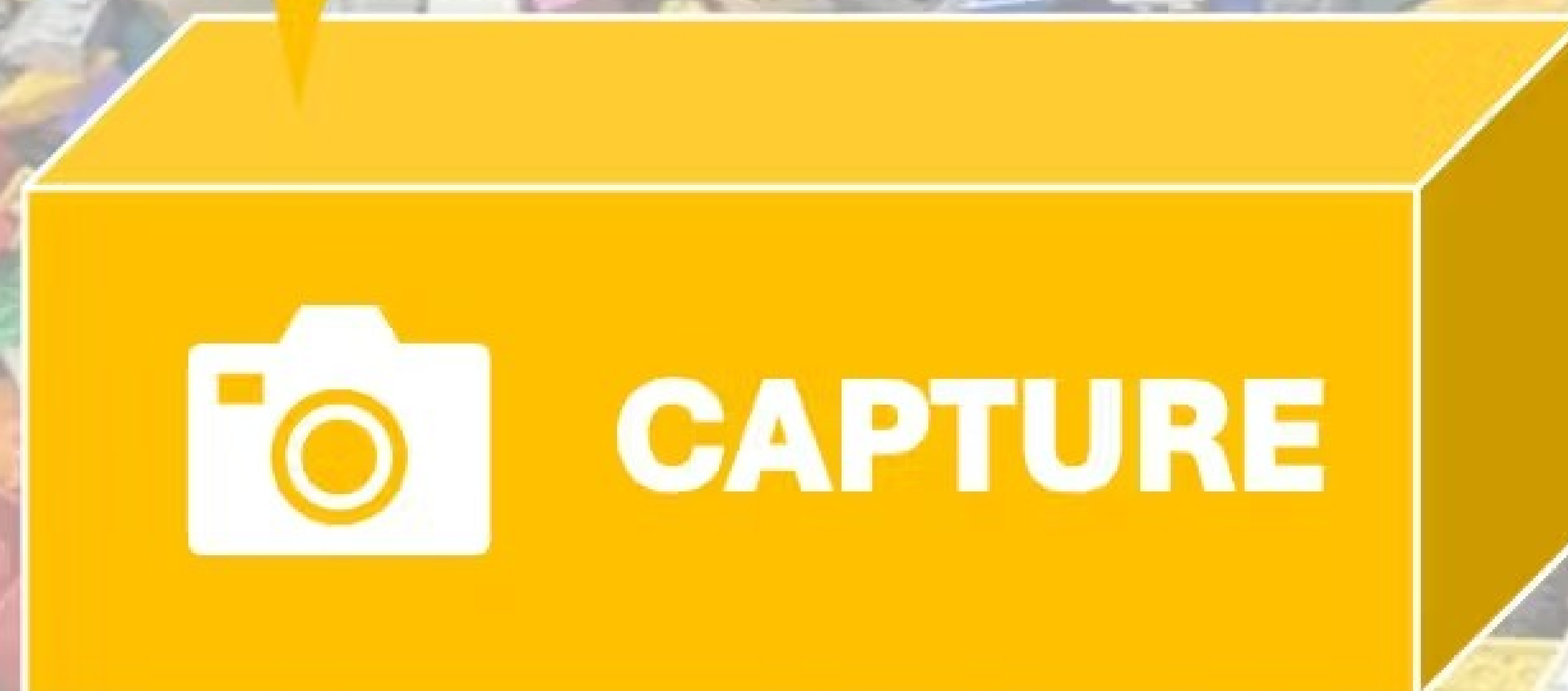


**Don't have a  
meeting with  
yourself**

**Think  
metaphor  
and story**









Build a tower  
that represents  
**you**

●  
*2 Minutes!*

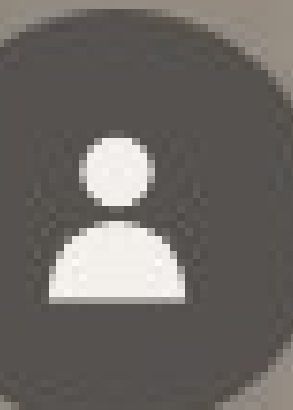




# How do you bring **Play** into your teaching?

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**2 Minutes!**





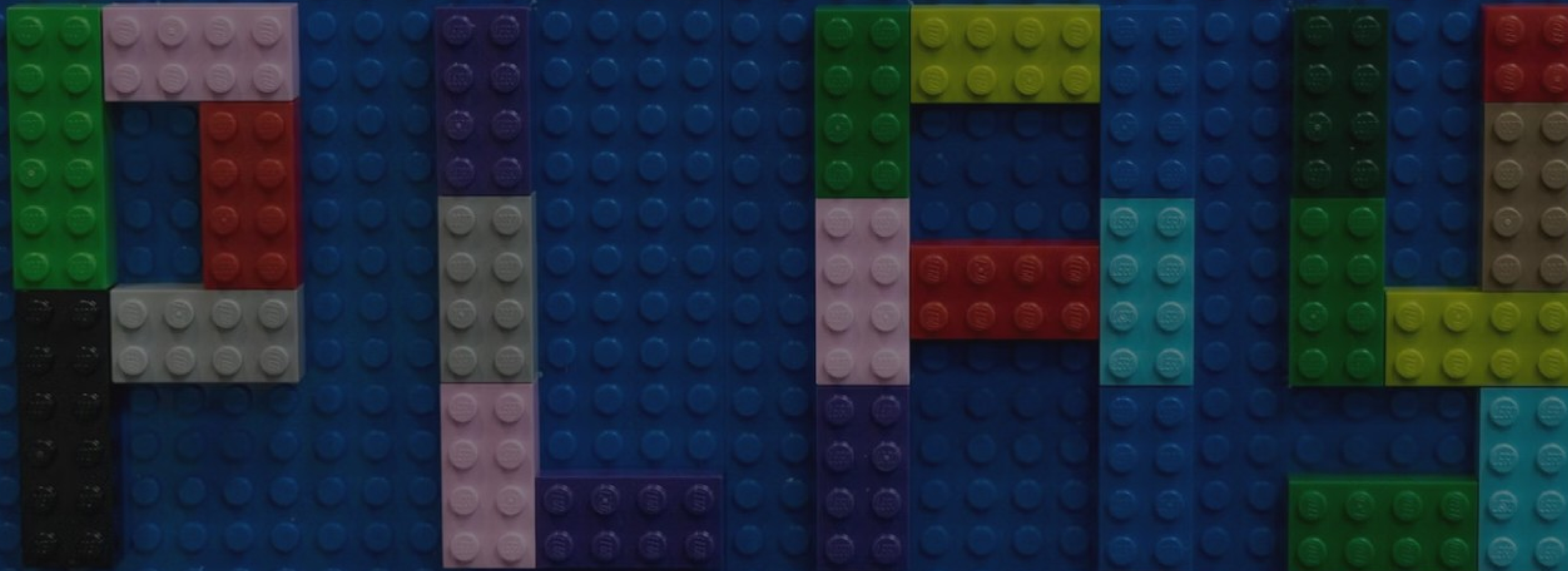
The background of the slide features a collection of various LEGO bricks and parts scattered on a light blue surface. In the upper left, there are several grey Technic beams, a black wheel, and a small orange square. A hand-drawn orange rectangle highlights a specific area on the left. In the center, there is a black wheel with a silver hub, a blue 2x4 brick, and a tan 1x2 brick. A hand-drawn teal rectangle is positioned at the bottom left. On the right side, there are three overlapping rectangles: a large orange one in the foreground, a smaller tan one behind it, and a teal one at the top right. The text 'Share & Capture' is written in a large, bold, black font across the orange rectangle.

# Share & Capture





# What ways do you use play in your teaching?





# How can we explore Growth Mindset using the LEGO® SERIOUS PLAY® Method?







PlaySTEM

Empowering CALD female students through gamified career exploration

[Our centre](#)

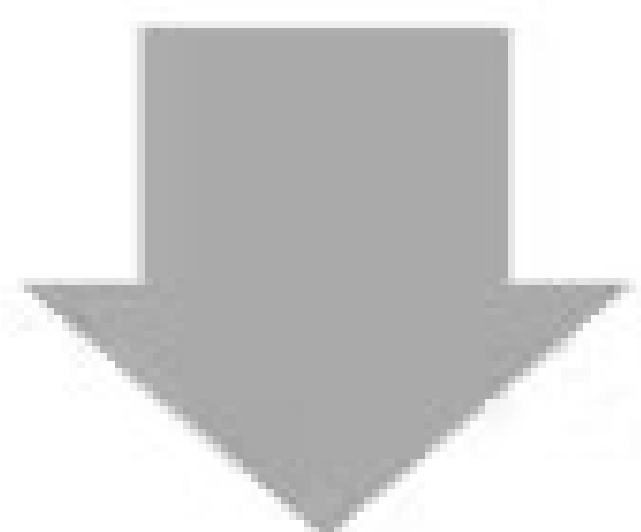
[Research](#) ▾

[Our people](#)

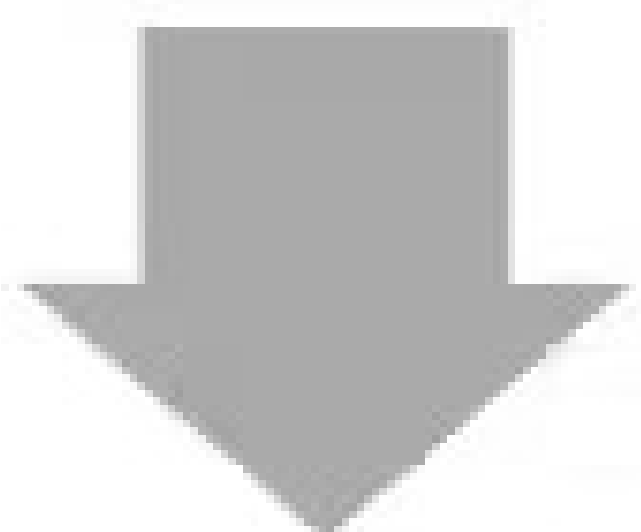
[Research degrees](#)

[News and events](#)

LEGO Serious  
Play Sessions



Virtual Reality  
Sessions



Empowering  
Parents



STEM  
Professional  
Networking



**Breaking down barriers,  
challenging stereotypes,  
and sparking a lifelong  
passion for STEM**

PlaySTEM is an innovative project dedicated to empowering girls from culturally and linguistically diverse (CALD) backgrounds and lower socio-economic families to discover and pursue exciting careers in Science, Technology, Engineering, and Mathematics (STEM). We're committed to breaking down barriers, challenging stereotypes, and sparking a lifelong passion for STEM through engaging and effective strategies.

This project is proudly funded by the [Strengthening Multicultural Queensland](#) program. Join us as we work to create a more inclusive and diverse future for STEM!



# Imagining Sustainable Cities using LEGO® Serious Play®





# Small Playful Actions...

- Elements of surprise and wonder = do something unexpected
- Playful Questions = Pause Predict Ponder
- Change Locations = Let's have class outside!
- Make Connections Physical = Map knowledge to location, person, or to other concepts
- Play with GenAI to work towards bigger playful activities - roleplaying, game shows, simulations





Look for the Joy and Play in what you do





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Thankyou!



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