

Magic Garden 2



Redesigning the preschool classroom into a creativity lab to exponentially enhance children's creativity.



Growing up, you may have had a similar experience?



Growing up, my experience was going to class where my genius-level creativity was squashed. My parenting and work life provided the same environment.

So by the time I became an adult, most of that genius-level creativity was largely extinguished, even though I observed that creative leadership is what allows us to bring more of ourselves to work and what employers want. Maybe you had a similar experience, or in your country or culture it may have been different again.

Whatever your upbringing or where you grew up, it's even more ironic then that we get adults whose creativity has been dulled to then design preschool classrooms that are intended to support children be creative. So then every cubic unit of measure, every cubic millimeter of every surface is designed to dull creativity; from the furniture, to the walls, the windows, the activities, books, teaching aids and more.

It's profound what happens when you provide a white space free of that. To test that, Krister has run creativity programs (being a creativity coach as an extension of his counselling diploma) in a photo studio's cyclorama - where there's only white empty space - and observed profound behavioural shifts as the children recreated that space purposefully.

- It let children express their talent and unfold in their development. It allowed them to create spaces and scenarios that supported them naturally bring even more of their talent out.
- It prepared them for the future of work by bringing more of their creative genius to working together.
- 4 year old children focused for 2 hours and gained the conceptual reasoning of 7 year olds more frequently.
- Being creative for a purpose and feeling empowered by their own realisations, significantly reduced children's violent and disruptive behaviours, supporting children instead to remain calm, focused and working together.

Challenge

In 2015, Krister founded a team with investment capital to redesign the preschool classroom experience so that it exponentially enhanced the creative ability that was already innately present in children and adults but being dulled by today's classroom activities and furnishings. Piloting the experience with a G8 Education preschool led to a much wider range of profound behavioural shifts.

The design was inspired by a breakthrough insight taken from user research Krister conducted at Sydney's Powerhouse Museum. It showed how children, by their very design, innately create, solve problems and learn together with their whole bodies using street games such as role playing. This activity also involves sketching and making things. Together, these universally familiar play activities are the most empowering way to be creative and learn. Being innate to all of us, they are also among the most effective ways of working, and are frequently used in creative industries such as Design and Software Development.

Another feature that enhances creativity is collaboration. Taking inspiration from the true saying that "it takes a village to raise a child", the preschool and design team wanted to open the classroom to greater participation by families and community.

Solution

Transforming the classroom into an interactive theatre of digitally projected sets, props and costumes, supported children to use the simple art of sketching whatever their storyworld needed to contain, to progress their role plays to the next chapter of their unfolding story. Essentially, digital projectors were used to enlarge children's hand drawn sketches onto their white T-shirts (transforming them into costumes), white walls and floors (transforming them into sets) and the white drapery of structures like tents and cubby houses (transforming them into props). To change their scenery and costumes, children only needed to draw a sketch on a new piece of paper or make a collage of each other's sketches, and place it in front of a video camera. The relative ease with which the classroom's setting could be adapted meant that a whole storyworld could be created to support one child to hone and express their talent in a way that inspired and engaged everyone else's creativity and learning.

Expanding the experience beyond the classroom by video conferencing adults in, to play characters children created, supported the classroom grow its community worldwide to include parents, extended family and even educators and specialists like chefs, in other continents like America.

Role

Led the design and development of the interactive theatre as an Industrial Design Lead, while immersed as an educator in a preschool team, reporting to the preschool director and families.

Team

Working in-house with an engineer, a service designer, full stack software developers, an illustrator, educators and families, guided by Prof. Karin Murriss of Capetown University's School of Education.



Design process

1. Pitching an experience prototype and concept sketches to convince an investor, a preschool and their families to start a business from \$0
2. User Research using interviews, contextual enquiries, secondary research including social media analysis, trend analysis, experience prototyping, synthesis of data to identify the key opportunities.
3. Building advisory-partnerships including with Cape Town University's School of Education
4. Technology research and development
5. Design of educational programs to EYLF and NQS schooling standards
6. Concept design and budgeting
7. Applying anthropometric and ergonomic principles to make the design work for children and teachers.
8. Design, engineering and technical drawings in CAD
9. Production liaison of illustrations and software development
10. Prototype making, construction and usability testing
11. Photo shoot of a demo
12. Running educational programs
13. Customer feedback, A&B tests, behavioural studies using cameras and surveys to measure the effectiveness and desirability of the solution.

Learnings

- If (according to a study by NASA) our creativity is at genius level at age 5 but is nearly completely dulled by parenting, schooling and work by the time we become adults, would it not perpetuate the cycle of squashing children's creativity by having an adult design the classroom experience? Is it no wonder that then every tiny cubic unit of measure of a classroom's design (from its walls and furnishings to its toys and teaching aids) is stifling creativity and expression, because classrooms intended to foster creativity are paradoxically designed by adults whose creativity has already been dulled?
- Therefore, transforming the classroom into a user generated experience creates a safe space, free of those impositions to allow true talent to be expressed and found.
- More effective than confirming those emerging talents to the child is to redesign the space to allow the child to use their talent more often because it inspires and engages everyone else's creativity and learning.
- Expression through making, sketching and role plays supports children instantly demonstrating their innate talents and unique essence.
- Children role play to test real life scenarios the same way designers prototype services and product experiences. Role playing is a powerful way to learn and build new futures fast.
- Digital projections inspire collaboration by transforming a space into new worlds of work. Screen technology triggers sedentary activities and disconnection from others.

Impact

- The new classroom experience prepared children for the future of work by supporting them to bring more of themselves to work (their commitment to work and genius exhibited in the form of their unique talents and essence). These are the key creative leadership qualities employers look for.
- 4 year old children focused for 2 hours without break, from their own will, and gained the conceptual reasoning of 7 year olds more frequently.
- Being creative for a purpose, significantly reduced violent and disruptive behaviours, supporting children instead to remain calm, focused and working together.

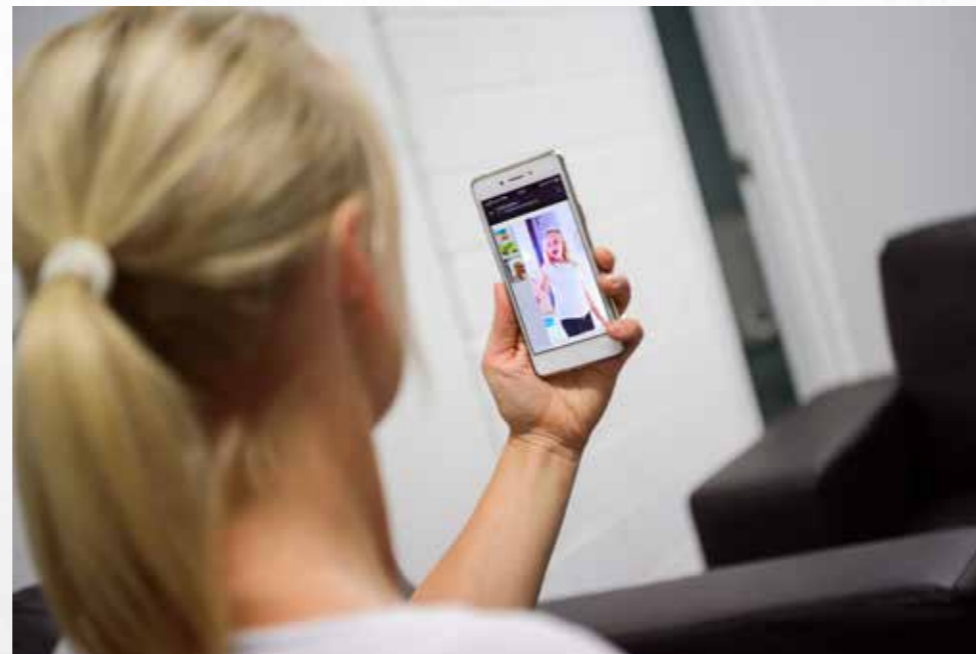
Drawing a picnic blanket and then sitting on it, enjoying a real picnic with apples to seed the question, “What came first, the apple or the seed?”



As children sketched their sets, props and costumes for their role plays, their drawings were projected around the room and onto their T-shirts. When they added characters to their scene it triggered role plays. As a child's unique talents emerged, favourite topics and scenarios were drawn as sets and props. These story worlds supported a child to play in a familiar setting that let them use their talents more, and allowed them to be immersed in a situation that called on them to draw on greater wisdom from within, for the benefit of all.



Parents bringing their unique strengths to partake in children's role plays sparks creativity. It takes a village to raise a child, specifically their creative genius. This father video-conferenced in, to role play being a greedy caterpillar who wouldn't let go of the apple it made into its home. The boy wanted the apple, and had the genius idea to make a trade by offering to feed his father an apple.



Applying human measurements to make the experience fit all ages. Then demonstrating the experience before running formal studies in a preschool.

