ROSAN **BOSCH**

PLAY *to* LEARN

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PREFACE

All children are born creative and eager to learn. Curiosity is coded in our DNA. That is why playing is our innate approach to learning. We wonder, we explore, we test, we learn from the first breath we take. It is our life-long responsibility to nourish and unleash our creative potential. Motivation is key to accomplish this and playing is the best motivational driving force.

The way we educate our children reflects the way we think of ourselves. So, why are so many schools designed as instruments of control? If we want our children to be able to navigate in an unpredictable future, we should encourage them to learn how to learn and keep growing. We should give them the freedom to invent, experiment, be creative and, above all, play!

Design is a shortcut to changing habits and inspire new ways of behavior. My goal with this book is to share with you how I do this at Rosan Bosch Studio and to share my learnings.

As a contemporary artist that grew into working multidisciplinary with art, design, and architecture, my point of origin has always been the question “Why?” A continuous questioning of the world surrounding us and the way we do things is the main driver of my work. Hopefully, this book will inspire you to start asking questions and changing the way you see and do things.

Designing new learning environments also means asking “Why?” and starting a conversation and dialog with everybody involved. Because learning is something we do together. Together, we create learning environments that allow people to maximize their development potential. Together, we give children the opportunity to embrace their creativity and seize their future. And together, we might be able to create a better world, starting at school.

Imagine what we could do if we set each other free and started playing.

Liceo Europa, Zaragoza, Spain

INTRODUCTION

To play is to learn

My firstborn expressed a keen interest in reading and drawing from his very early years. Curious and eager to learn, he even taught himself to read before starting school. As a creative child, he utilized this skill to produce newspapers featuring home-made articles and drawings, all of which he published at his own “publishing house”.

To make up stories and put them into writing, to draw illustrations and set up a layout using old-school cut-and-paste technique takes a wide range of skills. Though of course, my son was not aware of how much he learned throughout this entire process. As with so many other skills before, his new capacities came naturally to him as they developed through play.

By the age of six, he was enrolled in our local primary school and as his first day of school arrived, he was bubbling over with anticipation. But it did not take long before things started to change. Little by little, my creative bookworm began to disregard reading and stopped inventing stories. He started to distinguish between school time and spare time and would say things like, “I am off, I don’t have to read now”, and schoolwork became more and more of a duty to him. Slowly but surely, I watched him lose his creative impulses and his motivation to learn.

At the same time, his father and I started getting complaints from his teachers. Our son had difficulties sitting still and kept disturbing the class with chatter. The teachers let us understand that they were well aware that this maladaptive behavior was due to our son getting bored during class. Nevertheless, they did not have the capacity nor the resources to truly differentiate the teaching and put an end to his boredom. But the more bored he was at school, the less motivated he seemed with his school activities.

It was at yet another parent meeting with this agenda, I realized that I might be able to help out both the teachers and my son. One teacher in a room with 25 students clearly did not allow for student-oriented teaching. But outside the classroom was a large and empty hallway with completely untapped potential.

Western Academy Beijing, China

Why not give the children some more freedom to explore and express their creative ideas?

Why not open up the classroom, give some more freedom, and allow the children who needed less coaching to slip outside the classroom and into some comfy sofas in the hallway? Why not give the other students less disturbances, so they could concentrate better? Why not give the children some more freedom to explore and express their creative ideas? Why not utilize the power of design and the way our physical surroundings affect our behavior to a much larger extent than was the case?

Ever since, I have been absorbed in the pursuit of maximizing development potential for both children and adults. How can we enhance learning? And how can we increase the learners' awareness of how they learn in order for them to utilize this knowledge to proactively become even better learners?

Together with my team, I design learning environments that answer these questions. My goal is to encourage learners of all ages to master their own learning journeys and truly become empowered human beings.

I believe play is crucial for this work. Because playing is learning.

Play to learn – more than a title

Humans' natural-born curiosity forms the basis of our desire to play and serves as our primary driving force to learn. Through play, we investigate and discover the world. We connect with other people and engage with our surroundings. Play sets the basis for us to develop skills, enhance knowledge, and discover possibilities throughout our lives. And through play, we learn how to interact with each other. Play to Learn covers the fact that all people have this innate curiosity and motivation to play – and learn while doing so.

For most people though, the concept of play is limited to activities for enjoyment and recreation rather than serious purposes. That is completely misunderstood. Play is related to all kinds of activities that enable us to thrive and grow – from structured or guided play to exploring without constraints. Framed by our physical and cultural environment including friends, parents, and other people we interact with, play is not always fun. It can be serious business, challenging us and making us discover our boundaries and limits.

Research shows that play is fundamental to children's positive development and their ability to develop skills they will need in the future[1]. Yet, play is underestimated and undervalued in society and our educational systems. We prefer tests, results, and ready-made knowledge rather than development, process, and skills and we are not aware of the consequences this may have.

Instead of embracing the wonderful qualities and possibilities of play, we try to implement a culture of control, forcing children to learn a curriculum's predetermined "concepts of knowledge". But if we want our children to be able to cope in an unpredictable world, we need to preserve their sense of wonder and activate and nurture their curiosity, so they can find the motivation to learn new things and skills. Learning how to learn is the best way to produce new thoughts and develop new habits throughout life.

In other words, we need to encourage our children and each other to play and keep playing each and every day. To do that, we need to know how to foster play.

Through play, we investigate and discover the world. We connect with other people and engage with our surroundings.

Wonder DIY, create your own homeschool in cardboard, designed by Rosan Bosch Studio

Vittra Telefonplan, Stockholm, Sweden

The process of play

Play unfolds around different steps, which I call the “sequence of play”. Through these steps, we gain new experience and skills and develop as persons. We learn.

The kick-starter of play is our natural-born curiosity. To be **curious** and eager to discover the world, ourselves, and our surroundings is part of our DNA. It is the first motivational trigger and what drives playing, and eventually learning, forward. Think about a two-year-old and how she functions as a playing and learning machine wanting to discover, explore, and try out everything and everyone she sees.

Following the first notion of curiosity comes the sense of **wonder**. Here, we begin to process our initial impulse and reflect on it. How does this thing work? Think about the toddler again, reaching out and wanting to touch or investigate: What does this mean? Where does this go? Why do people react to this the way they do?

The sense of wonder then leads to a desire to **explore**. The stage of exploration is an experimental phase where we use all possibilities at hand, including all of our senses, to investigate what is feasible or not in relation to our topic. This stage is about gathering knowledge and information through both rational and sensory inputs.

After finishing this exploration, we begin to **connect** the dots of what we already know and findings from previous experiences with our new discoveries. This stage is about finding relations and meanings between what we already know and what we are about to discover. Here, we create a framework of understanding and process the unknown into a context we can work with and relate to.

Connecting the dots enables us to **transform** all of the input into a new concept which makes sense to us. At this stage, we are able to act on our initial impulse of curiosity and wonder. We imagine different worlds, fantasize about what we could do or master and canalize our newly discovered knowledge into a framework of new content. By riding on our wave of motivation, we **create** our own new reality, object, or story. And so, the process can start over.

Needless to say, in practice, this sequence is not always linear. We may jump between different stages and move back and forth in an iterative process. That is the beauty of play. It stimulates our imagination and activates our creativity in many different ways. It makes us improvise, which, in turn, inspires new ways of playing and learning. Rather than a straight line, playing unfolds as a positive spiral.

LEGO PMD HQ, Billund, Denmark

Rather than a straight line,
playing unfolds as a positive spiral.

Designing for uncertainty

So why are we not talking more about play and playful learning in schools? The answer to that question can be found by looking back in time. In the industrial age, people were given a fixed role and production processes were automatized and made as effecient as possible. The same happened with the education system.

To create equity in opportunity, education was standardized. Consequently, the school systems were designed to deliver the same education for all students with fantastic results. For a long time, the standardization of education made it possible to lift whole generations away from analphabetism and, indirectly, poverty. But things have changed over the course of time.

Looking into a future where the World Economic Forum anticipates that 65% of children entering primary school today will ultimately end up working in completely new job types that do not yet exist[2] demands a different understanding of what learning is and why we need to learn and go to school. A calculation made by the LEGO Foundation, predicting that 45% of the activities people are paid to perform in the US could already be automatized using technologies available today[3] proves that this reality is maybe far closer than we think. Furthermore, and perhaps as a consequence of this development, McKinsey estimates that up to 375 million people – or 14% of the global workforce – will need to reskill or upskill by 2030[4]. The demand for people who are able to reinvent themselves, reschedule, and relearn will increase dramatically in the years to come. Or, as Andreas Schleicher, OECD Director for Education and Skills, puts it:

"(...) time is of the essence if we want to broaden the goal of equity in education opportunities from providing everyone with the literacy and numeracy skills for employment, towards empowering all citizens with the cognitive, social, and emotional capabilities and values to contribute to the success of tomorrow's world[5]."

The cognitive, social, and emotional skills that Schleicher refers to are already in high demand by modern companies. Almost every job ad today calls for abilities such as collaboration, agility, and persistence just to mention a few. And it is not only companies that demand people that are ready to change. We are facing global crises in climate, health, economy, education, and more. Every year, nations are met by unforeseen disasters forcing leaders as well as citizens to act, adapt, and improvise in order to alleviate the crisis and find new ways of living.

The lockdown in the wake of the COVID-19 pandemic in 2020 proved all sectors capable of changing and changing rapidly. But who knows what comes next? If we are to prepare our children for the uncertain future, we are facing, we need to create learning environments where they can develop and enhance their cognitive, social, and emotional skills and learn how to use them in different ways and contexts. Where they can nurture their creativity, deeply understand how to collaborate, co-create, and practice their flexibility.

It is our responsibility, as adults, to empower our children to thrive and succeed in tomorrow's society, and learning how to learn is key.

Exponential digital learning

The exponential development in digital technology causes our world to change faster and faster. Even before the outbreak of COVID-19, lots of schools were already struggling to find a model for combining learning in the physical and digital worlds, but the pandemic fast-forwarded us into a digitalized future and forced us to realize the fact that there is actually just one world. Younger generations today do not distinguish between their physical and online presence. So, instead of focusing on the means when planning for future education, we should rather focus on the ends, being continuous learning in the sense of developing and applying skills (not memorizing fixed knowledge!), whether at school or at home, IRL, or online.

For a hybrid learning model to succeed, we need to give learners responsibility for their own learning and support them in becoming aware of their learning styles and learning preferences so that they can live up to this responsibility. Training awareness at school, by offering various learning environments that support multiple ways of working, will prepare learners for learning – and applying their skills – in any kind of setting, at home, at school, or elsewhere. The question is no longer whether they should be working physically or digitally when solving a given task, but rather how they solve it in the best possible way. They have to make this decision themselves.

Basisschool KA Zottegem, Belgium

Basisschool KA Zottegem, België

Differentiated learning landscapes

Now, what do a mountaineer, an academic writer, and a concert pianist have in common? Years of hard work led by a clear motivation to improve and excel within their field. People that are truly motivated are capable of doing almost anything whether it being climbing Mount Everest, writing a 400-page thesis, or mastering an instrument. But in order to unleash a strong intrinsic motivation, we need inspirational "triggers" and here the physical surroundings and our relationships with others play a vital role.

As we are all different and learn in different ways, we also get inspired and motivated by different things. While participating in a football match can be highly inspirational for some, others get much more inspiration out of immersing themselves in a fantasy novel, studying a mechanism, or enjoying a flower. Common to us all is the fact that learning spaces and environments offer the potential to create stimulating and engaging areas for everybody to learn[6].

By staging different options next to each other, the learning environment inspires and motivates.

A physical environment that offers learners the freedom to choose where to be and what to do enables them to make a choice and develop an awareness of what stimuli they prefer according to what they are doing. This is why the projects I design offer great freedom of choice, whether with regard to physical or social preferences. My goal is to establish an awareness of our surroundings' impact on us and thus teach everybody how to best strengthen and activate their motivation to learn.

It is not about putting it all out there at once. Instead, it is about offering learners a lot of differently designed situations and environments to choose from in a more organically structured way. By staging different options next to each other, the learning environment inspires and motivates. In this way, the physical surroundings become the third teacher[7], training learners to use their skills in multiple ways, developing an enhanced sensibility as to how they learn in different situations, and creating an awareness of how to activate and use their motivation to learn.

Learning together

At the center of all development of education stands the question "Why do children go to school?". Many school development projects prioritize all kinds of things from the cleaning guidelines, the working hours of the teachers, to the parking lot or the personal taste of the head of the school. They forget all about the main existential reason why somebody would go to school in the first place: "to learn and develop as a person". Therefore, I believe that everybody that wants to change the way we learn AND think about education should start by asking: "Why do we send our children to school?", followed up by the next question: "How do we learn?".

To me, raising these questions come with a strong urge to want to change the way we create schools, how they function, and how we use them.

Because creating a beautiful playful learning environment is so much more than just redesigning the physical surroundings. It also means rethinking pedagogy and the way a school is organized. The (re)configuration of any space can change habits and traditions and inspire new ways of behavior. It can create the possibility of implementing new ways of organization and it can stimulate learners to discover how they learn best.

Changing our learning environments means changing the way we see our world and the way we see ourselves and our children. It is a process that can only be done in a continuous dialog, with everybody involved.

Over the years, I have developed a framework at my studio for what we do and how we do it. It has taken the shape of a manifesto with ten tenets. In this book, I will share these with you, illustrated with case stories and combined with input from other people that have inspired me, who also try to change the world into a better learning place.

I would like to give children the opportunity to access their full creative potential and I hope to inspire you to do the same.

Changing our learning environments means changing the way we see our world.

THE GOLDEN RULES OF *CREATING PLAYFUL LEARNING LANDSCAPES*

Over the years, I have developed a framework for our work at Rosan Bosch Studio which has now taken the shape of a manifesto. Sticking to these ten tenets keeps us on track:

1. PLACE THE LEARNER AT THE CENTER.
2. TRUST. HUMAN BEINGS WANT TO LEARN. MAKE THEM FEEL TRUSTED.
3. GIVE THE LEARNER RESPONSIBILITY FOR THEIR OWN TIME AND LEARNING.
4. MAKE SURE THEY FEEL SAFE.
5. OFFER CHOICES. DIFFERENTIATE EXPERIENCES, ACTIVITIES, AND SPACES.
6. BELIEVE IN CREATIVITY. EVERYBODY IS BORN CREATIVE. UTILIZE THIS.
7. INSPIRE IN EVERY WAY POSSIBLE.
8. ACTIVATE ALL SENSES. LEARNING INVOLVES BOTH BODY AND MIND.
9. MOVE, TAKE DIFFERENT BODY POSITIONS, AND ACTIVATE THE BODY.
10. SOCIALIZE AND HAVE MULTIPLE COLLABORATIVE POSSIBILITIES.