Game methodology

In Yard4all project we are going to mix the *learning by doing methodology* and the *lean startup model* to equip students with the necessary skills to develop small businesses or projects through the phases that adults use for it.

The game aims to cover the phases necessary to build a "business", focusing in the school garden. For that we will use *Business Model Canvas* tool together with coaching tools for developing personal skills and competences.

Learning by doing to live experiences

All the activities developed within **the Yard4all project** try to achieve effective action-based learning. We intend that an active attitude be internalized, that it be practiced and go beyond education in values, because we consider that it is basically conceptual, that it does not affect action.

The methodology we use for developing skills in children is *learning by doing* under a natural learning process, that is, as simple and as close to reality as possible. Thus the child, educating him through projects, can practice, act, experiment and anchor knowledge in a fun way, almost unconsciously, in an open learning environment that allows him to display all his talent working collaboratively in groups.

Project education is very effective from a very young age. In addition, autonomy is developed with this, self-confidence is acquired, attention is focused on a specific objective to achieve the set goal and learning to work as a team cooperating in projects very close to reality; therefore, it is more attractive and allows exploring multiple possibilities, as well as learning to decide quickly and efficiently based on rational elements.

Learning by doing is a method that is based on the development of executive intelligence, which will provide the individual with evaluation criteria and also serves as advice for their decisions, since the generating / computational intelligence provides multiple possibilities or solutions and the development of virtues of action, such as perseverance, resistance and tolerance of frustration.

Our focus must be on preparing students for what the future will demand from them. Develop life skills such problem-solving, critical thinking, emotional intelligence, team-working, creativity or communications, among others, is the key for a successful 21st century education.

For this methodology to be fully effective, we have to take into account the following points

- Look deeply into your students' interests and work out the curricula around these. The more the kids can connect what they are learning to real life and their personal experiences, the more they will remember and learn.
- Create **project-based learning experiences** around those interests. Incorporating the Project Approach into the curricula, engages children intellectually and heightens their capacities for thinking, reasoning, and expressing their natural curiosity.
- Organize **hands-on learning experiences** as much as possible. This allows students to directly observe and understand what is happening, and is the best option when presenting something new that the kids haven't learnt about yet; it will be much easier for them to understand.
- Involve **emotional intelligence learning** across all areas of the curriculum. Developing emotional skills such as self-awareness, empathy, active listening or their self-esteem since they are little will help them understand how people act and react to circumstances in the future, how to manage their own emotions and how to deal with conflicts.
- **Document and make visible students' learning**. Visible classrooms can be identified by five key principles—that learning is purposeful, social, representational, empowering, and emotional.

All the work that is carried out in the project is aimed at to set of qualities and skills that make up the characteristics necessary to undertake, which are necessary to train in schools in order to become competent adults:

- • Ability to assume responsibilities and be ready for constant learning.
- • Management and planning skills to lead and implement a project from scratch.
- • Ability to adapt to change and problem solving to carry out the necessary actions in the event of unforeseen events.
- • Have emotional control, self-knowledge, self-esteem and self-criticism.

• Think creatively and take risks. Have initiative and interest in innovation.

• Know how to transmit ideas and lead groups thanks to great communication skills.

With this methodology we propose two clear objectives:

• To Explore and **discover their individual potential** as they develop skills and attitudes for a new world, which are critical skills to walk into the future

• **Work on entrepreneurship** adapting the *design thinking and lean startup* approach to children's language, combined with project work and experimental learning using the school garden as a learning focus
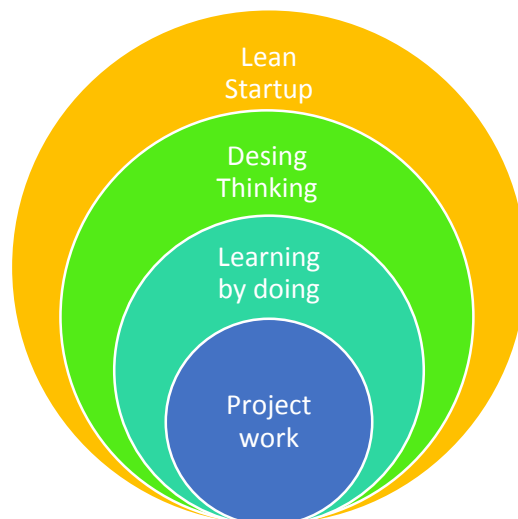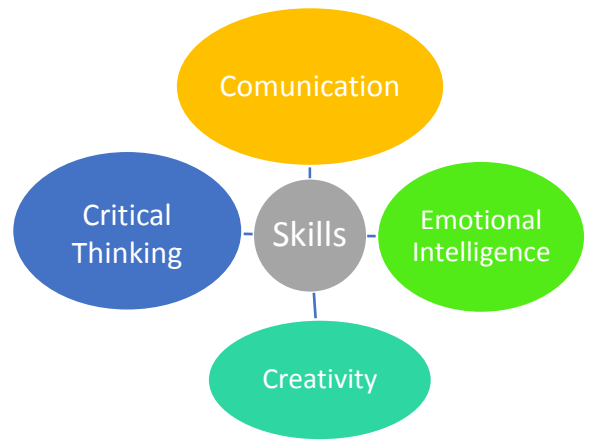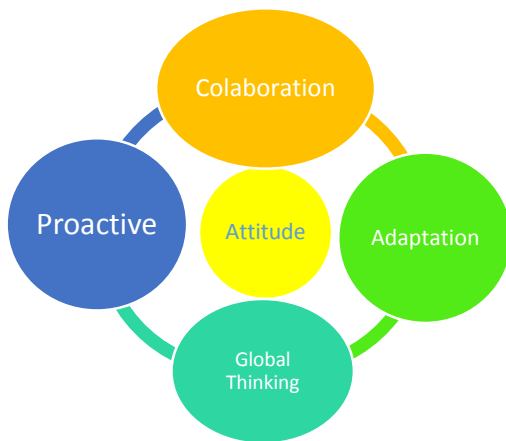
*Learning by doing

Lean startup Methodology

Lean Startup as a business development philosophy prioritizes speed and learning over perfection – it asks the entrepreneur to define success in terms of "learning how to solve the customer's problem," as Eric Ries referred in his book "The Lean Startup,"

Lean Startup is a natural fit in a project-based learning environment where students are challenged to work on projects in line with their interests and the problems they want to solve. Lean Startup teaches students to focus on people to understand what a customer is and how to solve his or her problems.

Instead of sitting in chairs all day long, students are asked to "get out of the building" to do customer research, define a problem, build MVPs (minimum viable products), and validate the assumptions their business models rely upon.

With this methodology our students will look beyond the education system for solutions and ideas that will have an impact and quickly in the society.

There are five lean startup principles that teacher can apply in the classrooms:

1. **"Entrepreneurs are Everywhere**". Everyone has the capacity to think and act like an entrepreneur.
2. **"Entrepreneurship is Management"**. A startup is an institution what is not looking only for a product. It requires a new kind of management specifically geared to its context and not only to sell a product.
   Rather than measuring success by whether or not a project is on track, on time, and on budget, measure success by whether or not you're meeting the needs of our customers.
3. **"Validated Learning**. Startups exist not to make stuff, make money, or serve customers. They exist to learn how to build a sustainable business. This learning can be validated scientifically by running experiments that allow us to test each element of our vision, but The emphasis here should be on short time.

4. **"Innovation Accounting"**. To improve entrepreneurial outcomes, and to hold entrepreneurs accountable, we need to focus on the boring stuff: how to measure progress, how to setup milestones, how to prioritize work. This requires a new kind of accounting, specific to startups." Startups so often establishes a regular reporting cadence to discuss progress on current experiments (individual tasks, barriers, etc.), define new experiments, and develop an action plan for completed experiments. Effective experiments require effective communication about your learnings.

5. **"Build-Measure-Learn"** The fundamental activity of a startup is to turn ideas into products, measure how customers respond, and then learn whether to pivot or persevere. All successful startup processes should be geared to accelerate that feedback loop."

Basic steps to develop a business with Lean Startup model will be:

1) Identify a problem they are trying to solve.

2) **Build** a minimum viable solution to the problem.

3) Test it with users.

4) **Measure** a very specific aspect of the experience.

5) **Learn** what worked and didn't work.

6) Refine the solution based on learnings.

7) Repeat the process.

I have a challenge

I create solutions

I build the idea

I try and learn

I show the result

Lean startup model