



PLAYFUL
Mindset

CARLA ARELLANO GARRIDO • KENNETH GENT FRANCH



PLAYFUL MINDSET

To create, educate, undertake and innovate

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Co-founding partners of Momento Cero S.A.* (2005), Fundación Entrepreneur** (2012) and Open Box Consulting*** (2016). Entrepreneurs, business people and consultants in the creation of cultures for enterprise and innovation. Creators of products and experiences for the development of XXI century competencies through active learning methodologies. Skill developers through the application of gamification in any context.

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Creators, directors and editors of the *Mo.O Magazine* (2003-2010). Development leaders for a series of innovative educational games and hands-on training experiences designed to develop XXI century competences through Learning by Playing. Developers of transferable, replicable and scalable experiences based on the use of games to motivate and generate meaningful learning experiences for all participants.

Notable awards and recognition:

- 2014. Reinventing Learning Challenge Award. Play to Learn. #Play2Learn. World Semi-finalists Ashoka Changemakers and Lego Foundation.
- 2013. Technological Development Award, Association of Exporters and Manufacturers (Asexma).
- 2012. Small Business of the Year Award, President of the Republic and Ministry of Economy.
- 2010. Avonni Award, Finalists in Education Category, Innovation Forum.
- 2008. Made in Chile Innovation Award, País Digital Foundation and Santiago Chamber of Commerce.
- 2005. Honorable Mention in Social Entrepreneurship Award, Business Ideas Competition, Chile Empresario and Universidad Adolfo Ibáñez.

— LET'S PLAY? —

How long has it been since you were asked, or you asked yourself,
that question?

Generally speaking, the older we get, the less we play. Something happens as we get older that causes us to restrict our innate capacity for play, and why not?! As we “grow up”, we hear more and more expressions like “get serious”, and “stop playing around”. These phrases presuppose that people who play aren't serious about it, that we don't believe play to be the best way to fire up your creativity, to find those difficult solutions, to shake off your prejudices and, of course, to learn.

We want to get more and more people playing. Yes, more people. This is because 10 years of experience playing with executives, business people, students, housewives, and entrepreneurs have convinced us that developing the Playful Mindset empowers people to create, educate, undertake and innovate.



WHY DO WE BELIEVE THIS?

a)

Because playing allows us to break down barriers to entry. If you invite someone to play, it is likely that they will accept immediately, more so than if you say “let’s study” or “let’s work”.

b)

Because games are inclusive. Your level of education and social background don’t matter: a well-designed game can be a fantastic learning tool and ensure that everyone gets around the table to play as equals.

How many other tools or methodologies allow that?

c)

Because... Have you seen how many initiatives there are currently aimed at improving the quality of education around the world?, and how many are aimed at increasing innovation in business?, or how many are aimed at encouraging entrepreneurship in future generations?

T H O U S A N D S !

But... What happens when the consultants leave? What’s left behind?

That’s exactly the challenge that we took on when we chose this methodology: How can we make an impact that lasts even after we, the consultants, have moved on?

What do we leave behind in the company, university or school to ensure that the process continues, and that future generations can follow the same path? The answer we found is simple: games.

Games that help people easily and affordably maintain and replicate the processes we initiate.

And as if that wasn’t enough, we have a great time while we are playing!

THINK BACK...

WHEN WAS THE LAST TIME
you played something?



GRAB A PENCIL BEFORE
YOU CARRY ON READING.

WRITE DOWN THE FIRST THREE EMOTIONS THAT COME TO MIND
WHEN YOU REMEMBER THE LAST TIME YOU PLAYED:

1.-

2.-

3.-

We can bet that the majority are positive,
and that just by remembering, you smiled.
So, the invitation is there:

LET'S PLAY?

WHO ARE WE, WHAT DO WE WANT AND WHERE ARE WE GOING?

These three questions have formed the basis for all our years of work as entrepreneurs and business people. Finding the answers is a never ending task, as our context is constantly shifting, but the relevance of the questions is unquestionable.

Being conscious of this has allowed us to change, to adapt, to reinvent ourselves, and above all to keep striving towards our goal of helping more and more people to Learn by Playing with the same limitless energy as always.

Who are we..? Essentially, a couple of positive-thinking entrepreneurs who've lived to tell the tale, with all the joys and strength that the experience of enterprise brings with it.

What do we want..? To turn the world into a giant game board, where each one of us is a key player in bringing Learning by Playing to future generations, where the Playful Mindset can help make complex, important content more digestible for more people. And that's the point: taking something difficult and making it easy to understand.

Where are we going? Wherever our play takes us. A roll of fate's dice brought us together to start a company and a not-for-profit foundation that are both dedicated to helping people develop the Playful Mindset.

The only limit, for now, is that there are no limits.



THIS EDITION OF THE BOOK IS DEDICATED TO ALL
THE AMBASSADORS FOR THE LEARNING BY PLAYING METHODOLOGY
WHO HAVE TAKEN PART IN THE INTERNATIONAL CERTIFICATION
PROCESS WE CARRY OUT AT MOMENTO CERO AND FUNDACIÓN
ENTREPRENEUR. THEY HAVE HELPED US FORGE ALLIANCES,
BUILD CREATIVE COMPLICITY, AND GENERATE
A POSITIVE IMPACT IN OUR COUNTRIES.

THANKS TO EVERYONE WHO HAS HELPED
MAKE THESE GAMES POSSIBLE.

CARLA Y KENNETH





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for repurpose a game

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“MAKING THE SIMPLE
complicated
IS COMMONPLACE;



— *making the* —
complicated
AWESOMELY SIMPLE,
THAT'S CREATIVITY”

CHARLES MINGUS

LET'S PLAY?

TO PLAY:

To participate in a pleasant recreational activity with the purpose of entertaining oneself, having fun or developing certain skills. 🎮

LET'S LEARN?

TO LEARN:

To gain knowledge of something
either through study or experience. 🧠

LEARNING BY PLAYING?



TO MAKE SURE
CREATING, EDUCATING, UNDERTAKING AND INNOVATING
IS ALWAYS FUN.

WE ALL HAVE AN IDEA OF WHAT
IT MEANS TO CREATE AND EDUCATE

BUT,

WHAT DO WE THINK
ABOUT ENTERPRISE,
IN AN UNDERTAKEN WAY,
AND INNOVATION?

ENTERPRISE AND INNOVATION HAVE BECOME VERY POPULAR WORDS IN RECENT YEARS,

DO YOU THINK YOU
COULD DEFINE THEM?

ENTERPRISE IN AN UNDERTAKING WAY:



INNOVATION:



DO YOU KNOW ANY ENTREPRENEURS? WHO?




DO YOU KNOW ANY INNOVATORS? WHO?



BUT

WHAT DO WE UNDERSTAND BY:

INNOVATION

The process by which knowledge and ideas are transformed into new products, services, or ways of doing things that add value to and meet a need in the market. 

INNOVATOR

A person who makes a meaningful contribution that is new, original, interesting, and adds value.

INVENTOR

A person who devises, creates, conceives, or develops something that didn't exist before.

WE BELIEVE IT IS VITAL

TO UNDERSTAND THE DIFFERENCE BETWEEN THESE CONCEPTS:

THE ENTREPRENEURIAL SPIRIT

An attitude that drives people to bring their ideas and projects to life.

ENTERPRISE:

The process or result of an entrepreneurial attitude. Often, people see these terms as limited to the world of business, but they can also apply to personal projects such as learning and creating.

ENTREPRENEUR

A person who takes on difficult tasks with grit and determination, who is willing to take risks, and who can identify opportunities and organize their resources according to their personal objectives.

BUSINESS PERSON

The owner of one or more business(es).

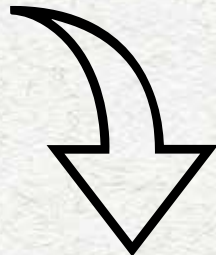


SO BEING AN ENTREPRENEUR ISN'T THE SAME AS BEING A BUSINESS PERSON.

THERE MAY BE MANY ENTREPRENEURS WHO HAVE NEVER HAD A BUSINESS, AND THERE MAY BE MANY BUSINESS PEOPLE WHO HAVE NEVER BEEN ENTREPRENEURS.

WE HAVE TO DISTINGUISH BETWEEN AN **INNOVATOR** AND AN **ENTREPRENEUR**, BECAUSE THE LATTER DOESN'T NEED TO MAKE A NOVEL CONTRIBUTION. THEY JUST NEED TO INTERACT WITH THE WORLD AROUND THEM IN A SUCCESSFUL WAY AND TO MEET THE OBJECTIVES THEY SET FOR THEMSELVES.

ARE ENTREPRENEURS BORN OR MADE?



They are made

WHAT ARE THE FACTORS
THAT CONTRIBUTE TOWARDS
A PERSON BECOMING AN
ENTREPRENEUR?



FAMILY HISTORY



HOME LIFE



FORMAL EDUCATION



THE SOCIAL IMAGINARY



BUT, ABOVE ALL,
ARE THE ACTIONS A PERSON TAKES 🌀

WOULD YOU LIKE TO KNOW IF YOU ARE CURRENTLY AN ENTREPRENEUR?

BELOW, WRITE WHAT YOU BELIEVE REPRESENTS
AN ENTERPRISING ACTION:

IN YOUR PERSONAL LIFE:

IN YOUR WORK LIFE:

IN YOUR SOCIAL LIFE:



BEARING IN MIND WHAT YOU WROTE IN EACH SECTION,

CAN YOU SEE THE FOLLOWING 5 FACTORS?

	Yes	No
I. PASSION		
II. DEDICATION		
III. RISK		
IV. EFFORT		
V. DISCIPLINE		

IF, IN ANY OF THE EXAMPLES, YOU ANSWERED WITH 5 “YESES”, YOU’RE AN ENTREPRENEUR.

If you repeat this exercise further down the line, it shouldn’t surprise you that what today represents an enterprising action for you might not do so in the future, when you have learned and developed capacities that you didn’t have before.

That’s when it’s time to set yourself another challenge and get out of your comfort zone again to start another enterprise.

THE ENTREPRENEURIAL SPIRIT
IS AN APPROACH TO LIFE THAT
CAN AND MUST BE TAUGHT

HOW CAN WE EDUCATE
FOR ENTERPRISE?

DEVELOPING
COMPETENCIES
LINKED TO THE ENTREPRENEURIAL
SPIRIT

SKILLS
+
KNOWLEDGE
+
CHARACTER

3

FOR THIS TO OCCUR
THREE CONDITIONS
MUST BE MET



ANYBODY CAN SHOW THEY HAVE THE
ENTREPRENEURIAL SPIRIT

BY DIFFERENT ROUTES



ENTERPRISE
IN BUSINESS
START UPS



SOCIAL, POLITICAL, ARTISTIC,
SPORTING, OR ENVIRONMENTAL
ENTERPRISE



ENTERPRISE
IN PERSONAL
PROJECTS



INTRA-ENTERPRISE
WITHIN AN
ORGANISATION

THE CHALLENGE IS TO MAKE SURE

people

BECOME AGENTS OF CHANGE

**WHO ARE ABLE TO CREATE SHARED VALUE
AND WELFARE WHEREVER THEY ARE.**

IF WE CAN LEARN TO:



ADD



WRITE



RIDE A BIKE



WALK



READ



**WE CAN
LEARN
TO UNDERTAKE
AND INNOVATE**

WE NEED INNOVATIVE PEOPLE WITH
THE ENTREPRENEURIAL SPIRIT!

WHAT FOR?

SO THEY CAN PUT THEIR TALENTS TO GOOD
USE IN THE SEARCH FOR SOLUTIONS TO SOCIAL
AND PERSONAL PROBLEMS AND CHALLENGES.



BUT BE CAREFUL

THE END DOES NOT JUSTIFY THE MEANS.
JUST BECAUSE ENTERPRISE IS
"IN FASHION", IT SHOULDN'T BE
CONSIDERED INTRINSICALLY GOOD.

THE ETHICAL PERSPECTIVE

WITH WHICH WE APPROACH AN ENTERPRISE
IS WHAT MAKES THE DIFFERENCE.

BUT BESIDES ENTREPRENEURS AND INNOVATORS,
WE NEED FLEXIBLE PEOPLE.

ACCORDING TO ESTIMATES FROM THE WORLD ECONOMIC FORUM,

65% OF CHILDREN

who are currently entering education will end up working in
JOBS THAT DO NOT EVEN EXIST YET.

"In the essence

OF AN ENTREPRENEUR

IS HIS EXTREMELY

POSITIVE MENTAL

ATTITUDE".

SERGIO ROJAS

BELIEVING THAT WE ARE
ABLE TO DEVELOP
OUR ENTREPRENEURIAL SPIRIT
IS THE FIRST STEP TO DEVELOP IT

FIXED MINDSET:

Is based on the belief that intelligence and skills are static phenomena. That is to say, that each individual is gifted with a particular skill set that will never change. The consequence of this is that people lose interest in finding solutions to challenges as they believe it will not have a positive outcome for their skills. 5

GROWTH MINDSET:

Is based on the belief that intelligence and skills can be developed through effort. This causes people to see problems as challenges to be overcome, and to see failure as an important part of the growth and development of an individual's skills. 5

IN THAT AREAS OF YOUR LIFE
DO YOU SEE A GROWTH MINDSET?
AND A FIXED ONE?



A GROWTH MINDSET.

INTELLIGENCE CAN BE DEVELOPED

IT LEADS US TOWARDS THE DESIRE TO LEARN AND, THEREFORE, A TENDENCY TO TAKE ON CHALLENGES, OVERCOME OBSTACLES, MAKE AN EFFORT, AND LEARN FROM OTHERS' SUCCESSES AND CRITICISMS

> **SUCCESS OF OTHERS**
FIND LESSONS AND INSPIRATION IN THE SUCCESS OF OTHERS.

> **CRITICISM**
LEARN FROM CRITICISM.

> **EFFORT**
SEE EFFORT AS THE PATH TO MASTERY.

> **OBSTACLES**
PERSIST IN THE FACE OF SETBACKS.

> **CHALLENGES**
EMBRACE CHALLENGES.

> **CHALLENGES**
AVOID CHALLENGES.

> **OBSTACLES**
GET DEFENSIVE OR GIVE UP EASILY.

> **EFFORT**
SEE EFFORT AS A FRUITLESS OR WORSE.

> **CRITICISM**
IGNORE USEFUL NEGATIVE FEEDBACK.

> **SUCCESS OF OTHERS**
FEEL THREATENED BY THE SUSSCESS OF OTHERS.

THIS LEADS US TO WANT TO APPEAR INTELLIGENT AND, THEREFORE, A TENDENCY TO AVOID CHALLENGES AND OBSTACLES, TO MAKE LITTLE EFFORT, AND TO SHY AWAY FROM OTHERS' SUCCESSES AND CRITICISMS

A FIXED MINDSET.
INTELLIGENCE IS STATIC

AS A RESULT:
PEOPLE WITH A GROWTH MINDSET REACH EVER HIGHER LEAVELS OF ACHIEVEMENT.

AS A RESULT:
PEOPLE WITH A FIXED MINDSET MAY PLATEAU EARLY AND ACHIEVE LESS THAN THEIR FULL POTENTIAL.

BUT,

WHAT DO WE UNDERSTAND BY INTELLIGENCE?

WHAT DOES IT MEAN TO BE
"AN INTELLIGENT PERSON"?

Let's go back to basics

and look at the original meaning of the word intelligence.

"The term intelligence comes from the Latin *intelligentia*, which in turn is derived from *inteligere*. This is a word made up of two other terms: *intus* (between) and *legere* (choose). Therefore, the etymological origin of the concept of intelligence refers to someone who knows how to choose: intelligence helps us make the best decisions when it comes to solving a problem." **7**

“Who
DARES
to teach,



↔ MUST NEVER ↔

cease to learn”.

JOHN COTTON DANA

SO,

HOW DO WE CONTRIBUTE TO
THE DEVELOPMENT OF THE GROWTH MINDSET?


BY DEVELOPING...

XXI CENTURY COMPETENCIES


COMPETENCE:

The ability to perform a given task well. Competencies are based on knowledge, skill and attitude.

XXI CENTURY COMPETENCIES:

These are competencies that people need in order to be able to take on the challenges of the XXI century and the current economic and social context. 

SKILL:

The aptitude of an individual's for completing a given task, activity, or action. 



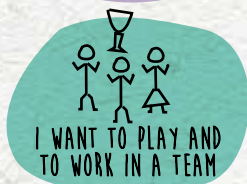
SKILLS

+

KNOWLEDGE

+

CHARACTER



COMPETENCE

I AM A GOOD SOCCER PLAYER!

A competency can be evaluated only through the practical demonstration that it has been learnt. "I am a competent soccer player".



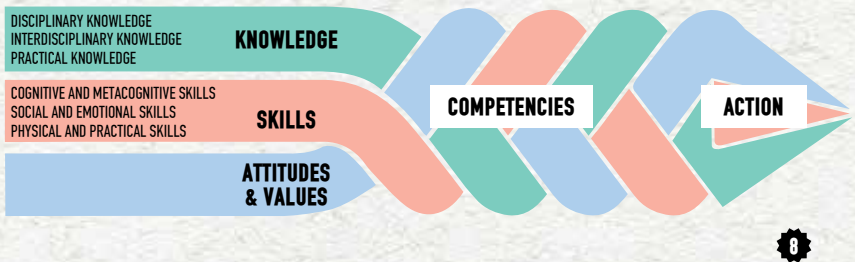
We can only know if this is true or not when we verify that the person can actually play soccer well.

WHAT ARE XXI CENTURY COMPETENCIES?

XXI CENTURY COMPETENCIES ACCORDING TO DIFFERENT SOURCES

The emerging OECD reference framework can be visualized from the following way:

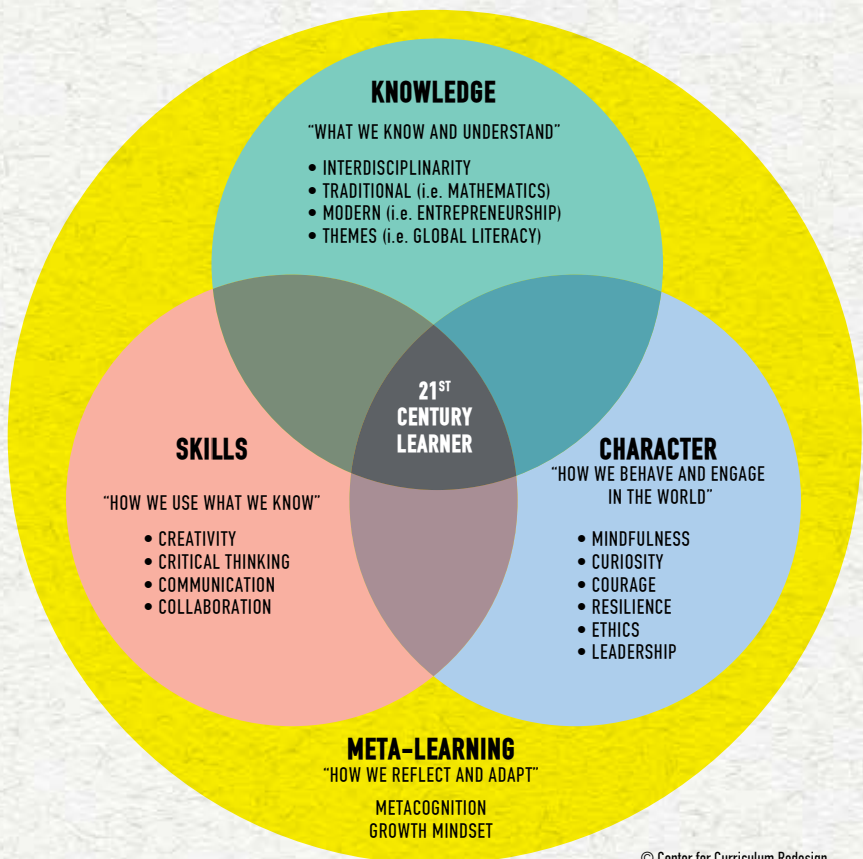
WHAT DO STUDENTS HAVE TO LEARN?



The dimensions of the proposed assessment of Global Competence.



CCR (Center for Curriculum Redesign) Framework, showing how the four dimensions interact:



XXI CENTURY COMPETENCIES ACCORDING TO DIFFERENT SOURCES

WORLD ECONOMIC FORUM

AT WORK IN 2020

Complex problems solving

Critical thinking

Creativity

People management

Coordination with others

Emotional intelligence

Judgement and decision making

Service orientation

Negotiation

Cognitive flexibility



ICT: Information,
Communication
and Technology

AT SCHOOL

FOUNDATIONAL LITERACIES

• Literacy

• Numeracy

• Scientific literacy

• ICT literacy

• Financial literacy

• Cultural and civic education

COMPETENCIES

• Critical thinking and problem-solving

• Creativity

• Communication

• Collaboration

CHARACTER QUALITIES

• Curiosity

• Initiative

• Persistence / grit

• Adaptability

• Leadership

• Social and cultural awareness



Given the many different interpretations and translations available, people often use the words “skills” and “competencies” indiscriminately. But we must not forget that:

SKILLS + KNOWLEDGE + CHARACTER = **COMPETENCES**

EVALUATING AND TEACHING THE XXI CENTURY SKILLS (ATC21S)

WAYS OF THINKING

- Creativity and innovation
- Critical thinking, problem-solving, decision-making
- Learning to learn/metacognition (knowledge about cognitive processes)

WAYS OF WORKING

- Communication
- Collaboration (team work)

TOOLS FOR WORKING

- Information literacy
- Information, Communication and Technology literacy

WAYS OF LIVING IN THE WORLD

- Citizenship—local and global
- Life and career
- Personal and social responsibility—including cultural awareness and competence.



CONSORTIUM FOR XXI CENTURY SKILLS (P21)

KEY SUBJECTS AND 21ST CENTURY THEMES

- English, reading or language arts, world languages, arts, mathematics, economics, science, geography, history, government and civics.

INTERDISCIPLINARY THEMES

- Global Awareness
- Financial, Economic, Business and Entrepreneurial Literacy
- Civic Literacy
- Health Literacy
- Environmental Literacy

LEARNING AND INNOVATION SKILLS

- Creativity and Innovation
- Critical Thinking and Problem Solving
- Communication
- Collaboration

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

- Information Literacy
- Media Literacy
- ICT Literacy

LIFE AND CAREER SKILLS

- Flexibility and Adaptability
- Initiative and Self-Direction
- Social and CrossCultural Skills
- Productivity and Accountability
- Leadership and Responsibility

21ST CENTURY SUPPORT SYSTEMS

- 21st Century Standards
- Assessments of 21st Century Skills
- 21st Century Curriculum and Instruction
- 21st Century Professional Development
- 21st Century Learning Environments



BUT,

HOW DO WE STIMULATE
THE DEVELOPMENT OF THESE
COMPETENCIES IN ORDER
TO GENERATE LEARNING?

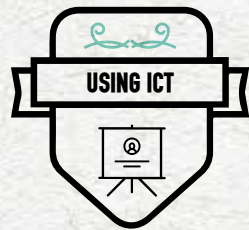
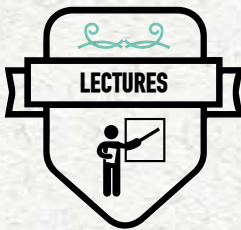
▶ GAINING KNOWLEDGE OF SOMETHING EITHER
THROUGH STUDY, PRACTICE, OR EXPERIENCE.

SO FAR, THE MOST
POPULAR WIDELY USED
METHODS

↩ **HAVE BEEN**

THE SAME OVER
THE PAST

DECADES



WHEN YOU WORK IN A GROUP,

•
ARE YOU REALLY WORKING IN A GROUP, OR JUST
SITTING NEXT TO THE OTHERS?

•
WHEN YOU GIVE A PRESENTATION,

•
DO YOU USE ICT (INFORMATION AND COMMUNICATION
TECHNOLOGIES) TO THEIR FULL POTENTIAL, OR JUST
DO A STANDARD POWERPOINT?

70%
of American
adolescents
claim that they
ARE BORED EVERY DAY
AT HIGH SCHOOL



AMONG THOSE WHO WIND UP
DROPPING OUT,
about half
IDENTIFY BOREDOM
— *as the primary factor* —
CONTRIBUTING
TO THEIR DECISION.

13

BASED ON THIS AND ON YOUR OWN EXPERIENCE,

HOW MUCH OF WHAT YOU HAVE LEARNED
HAS BEEN MEANINGFUL TO YOU?

DO YOU REMEMBER HOW YOU LEARNED IT?

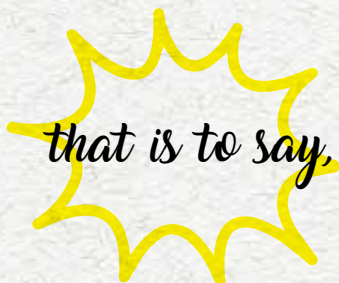
It's likely that, if you remember it, it's because it was meaningful to you, because you found it interesting and were able to link your prior knowledge to this new knowledge or experience. Of course, there must be emotions and feelings linked to that experience, and you probably even feel them again as you recall it.

THAT MEANS IT WAS A
MEANINGFUL LEARNING EXPERIENCE.

Congratulations!

→ These experiences occur when a person is able to link new contents and experiences to prior knowledge. To achieve this, it is necessary to establish a clear link between the socio-cultural context and the emotions felt prior to and during the learning experience and, therefore, with each individual's motivation.

NEUROBIOLOGICAL EVIDENCE
SUGGESTS THAT THE PRINCIPAL
COGNITIVE PROCESSES
WE DEVELOP
AT SCHOOL,



LEARNING,
PAYING ATTENTION,
MEMORIZING,
TAKING DECISIONS,
AND SOCIAL INTERACTION,

•

— ARE —
DEEPLY AFFECTED



PROCESS.



RECAPPING...

We know that for a learning experience to be meaningful, it has to come hand in hand with an emotional aspect and, at the same time, to be linked to an individual's context and prior knowledge.

BUT, HOW CAN WE ENSURE THAT EVERYBODY, OR THE VAST MAJORITY OF PEOPLE, INVOLVED IN THE LEARNING PROCESS MEET THOSE CONDITIONS?

We know there are many different learning styles, and that people might learn faster with audio-visual, reflective, or verbal methodologies, among others. That's why many authors have studied this phenomenon (including Felder and Silverman [1988], James and Gardner [1995], Reinert [1976], Gregorc [1979] and Dunn, DeBello, Brennan, Krinsky and Murrain [1981]).

HOWEVER, IT'S LIKELY THAT AN AUDIENCE WILL BE FULL OF PEOPLE WITH DIFFERENT LEARNING STYLES, MEANING:



COVERING ALL THE DIFFERENT STYLES IS A VERY COMPLEX AND DEMANDING CHALLENGE.



TRADITIONAL TEACHING METHODS BARELY COVER ANY OF THEM.

RECOMMENDED PERSONAL COMPETENCIES AND CHARACTER QUALITIES TO DEVELOP

10

SOCIAL AND CULTURAL AWARENESS

- Foster greater respect and tolerance for others
- Encourage empathy
- Foster cultural self-awareness

LEADERSHIP

- Foster the ability to negotiate
- Encourage empathy

How to teach all skills

ADAPTABILITY

- Foster the ability to process emotions
- Practise both flexibility and structure

- Encourage **PLAY-BASED LEARNING**
- Break down learning into smaller, coordinated pieces
- Create a safe environment for learning
- Develop a growth mindset
- Foster nurturing relationships
- Allow time to focus
- Foster reflective reasoning and analysis
- Offer appropriate praise

PERSISTENCE/GRIT

- Build in opportunities to learn from failure

INITIATIVE

- Provide long-term, engaging projects
- Build confidence in the ability to succeed
- Provide autonomy to make choices

CHARACTER QUALITIES

COMPETENCIES

CRITICAL THINKING/ PROBLEM SOLVING

- Give constructive feedback

CREATIVITY

- Offer opportunities to build and innovate
- Provide autonomy to make choices

COMMUNICATION

- Create a language-rich environment

COLLABORATION

- Foster greater respect and tolerance for others
- Provide opportunity for group work

CURIOSITY

- Encourage questions and guessing
- Provide autonomy to make choices
- Instill sufficient knowledge to ask questions and innovate
- Evoke contradiction

- Guide students to make their own discovery of topics
- Help students take advantage of their personality and strengths
- Provide appropriate challenges
- Offer engaged caregiving
- Provide clear learning objectives targeting explicit skills
- Use a hands-on approach

SO,

IN ORDER TO GENERATE THESE KINDS
OF EXPERIENCE, WE NEED

* * + + *

* **active** *

learning



METHODOLOGIES!

These are methodologies that bring people into a central role in the experience, where they are able to enjoy a fully interactive process of continual creation and leave behind the passive or receptive roles they are accustomed to. The focus is on the learner, not the facilitator: on what is learnt and not what is taught. This allows us to ensure the achievement of truly meaningful learning that can be transferred to real life.

SOME ACTIVE LEARNING METHODOLOGIES INCLUDE:



LEARNING BY PLAYING



FLIPPED CLASSROOM



LEARNING COMMUNITIES



PROJECT-BASED LEARNING



INVESTIGATIVE LEARNING



WORK-INTEGRATED LEARNING



REFLECTIVE LEARNING



HOLISTIC LEARNING



LEARNING TO THINK



COOPERATIVE LEARNING



PEER ASSISTED LEARNING




PROBLEM-BASED LEARNING

By spending more time “doing”, we experience things like emotions, feelings, links to prior knowledge, and depth in interpersonal relationships, all of which contributes to more meaningful learning.

PEOPLE REMEMBER





**DYNAMIC AND ACTIVE
ACTIVITIES THAT STIMULATE
AS MANY SENSES AS POSSIBLE
AND THAT ARE ADJUSTED
TO THE SKILL-LEVEL OF EACH
PARTICIPANT, ALLOWING THEM TO
ENTER IN THE “FLOW STATE”.**

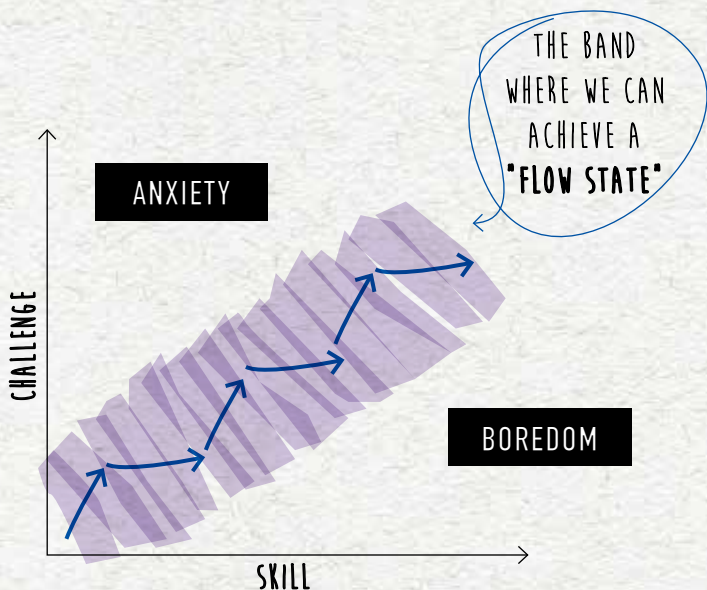


What do we mean by this?

Have you ever lost track of time when you are playing, or done something that truly caught your full attention?

That's Flow. When you are faced with a goal that pushes your capacities, but that isn't impossible, you are motivated to make sure you reach it. To remain in a Flow State, you need that the challenge of an activity to keep increasing at the same rate that your skills develop. This helps keep you interested and motivated, and thus helps you learn.





This graph shows that, as your skill level increases, you need the challenge to increase as well. If it doesn't, you'll get bored, find the activity too easy and probably just stop doing it. Likewise, if your skills in a certain field are basic and you are asked to do something complex, you will probably be demotivated and feel anxious as you can't do what is required of you to reach the goal. **13**

Now, if the challenge advances at the same speed as your skills do, you'll be able to stay in your "Flow State". This could explain the strategy of video games, where every time you complete a level, the game becomes more complex and thus keeps on pushing your skills to their limit. This is why you can play for hours and never get bored.

**DO YOU HAVE A GOAL THAT CHALLENGES YOU
AND MOTIVATES YOU AT THE SAME TIME?**

**WHAT ARE YOU DOING TO TRY
TO ACHIEVE IT?**

“Research into flow has found that the utilization of a high skill level in challenging tasks leads to high concentration, absorption, or immersion.

FLOW HAS ALSO BEEN RELATED TO LEARNING, THE DEVELOPMENT OF TALENTS, ACADEMIC ACHIEVEMENT, AND CREATIVITY IN THE PROFESSIONAL SPHERE.”

(CSIKSZENTMIHALYI, 1996; CSIKSZENTMIHALYI, RATHUNDE, & WHALEN, (1993))

IN SUMMARY...



WE NEED A
GROWTH MINDSET

We can work
on this by developing
COMPETENCIES.



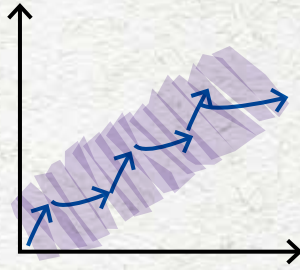
Therefore
WE NEED EXPERIENCES
THAT LEAD TO
**MEANINGFUL
LEARNING.**



Such experiences must

CHALLENGE
our
CAPACITIES

AND HELP US
REACH A STATE
OF FLOW.



IN OUR VIEW, THE MOST
EFFICIENT WAY TO ACHIEVE
THIS IS WITH

ACTIVE LEARNING
METHODOLOGIES.

GREAT, THAT ALL MAKES SENSE,
BUT

•
HOW CAN WE APPLY IT SIMPLY, EFFICIENTLY, AND SUSTAINABLY?

AS YOU BEGIN TO DISCOVER HOW
we'd like to invite
YOU TO RELAX AND
play

PICK A PAIR



PLAYFUL
mindset

PLAYFUL
mindset

PLAYFUL
mindset

PLAYFUL
mindset

PLAYFUL
mindset

PLAYFUL
mindset

PLAYFUL
mindset

PLAYFUL
mindset

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PLAYFUL
mindset

PICK A PAIR



PLAYFUL
mindset

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PLAYFUL
mindset

PLAYFUL
mindset

PLAYFUL
mindset

PLAYFUL
mindset

Here's our

ANSWER

LEARNING
BY PLAYING

LEARNING BY PLAYING ALLOWS YOU TO



Practice both verbal and nonverbal communication skills by negotiating roles, trying to gain access to ongoing play, and appreciating the feelings of others.

(SPODEK & SARACHO, 1998).



Respond to their peers' feelings while waiting for their turn and sharing materials and experiences.

(SaponShevin, Dobbeltgere, Carrigan, Goodman, & Mastin, 1998; Wheeler, 2004).



Experiment with roles of the people in their home, school, and community by coming into contact with the needs and wishes of others

(Creasey, Jarvis, & Berk, 1998; Wheeler, 2004).



Experience others' points of view by working through conflicts about space, materials, or rules positively

(Smilansky & Shefatya, 1990; Spodek & Saracho, 1998).

“YOU CAN DISCOVER
more about *a person*—



than in a year

of conversation”.

PLATO

SOME OF THE PECULIARITIES OF GAMES
THAT CONTRIBUTE TO THE DEVELOPMENT
OF COMPETENCES AT ANY AGE, IN ANY GROUP
OF PEOPLE, ARE THE FOLLOWING :



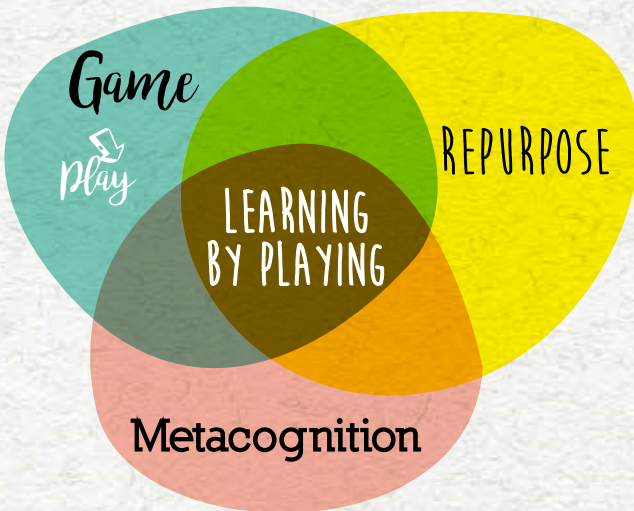


This involves repurposing a game in order to create a learning-teaching experience. It implies the development of a skill, knowledge and/or specific attitude through metacognition.

WHEN YOU PLAY, WHETHER YOU REALIZE IT OR NOT, YOU ALWAYS LEARN SOMETHING.

We have all played at one time or another, but what is the difference between "playing" and "Learning by Playing"?

When the game has a clear purpose, develops a skill, attitude, or specific knowledge, and stimulates metacognition, that's Learning by Playing.



THIS WAY, THROUGH LEARNING BY PLAYING WE CAN REPURPOSE
THE DEVELOPMENT OF XXI CENTURY COMPETENCIES.

BUT, WHAT IS REPURPOSING A GAME?

THE ACT OF MODIFYING ESSENTIAL ASPECTS, INCORPORATING CONDITIONS THAT CHANGE RULES AND/OR ADD NEW ELEMENTS TO A GAME IN ORDER TO MEET A SPECIFIC TEACHING-LEARNING OBJECTIVE.

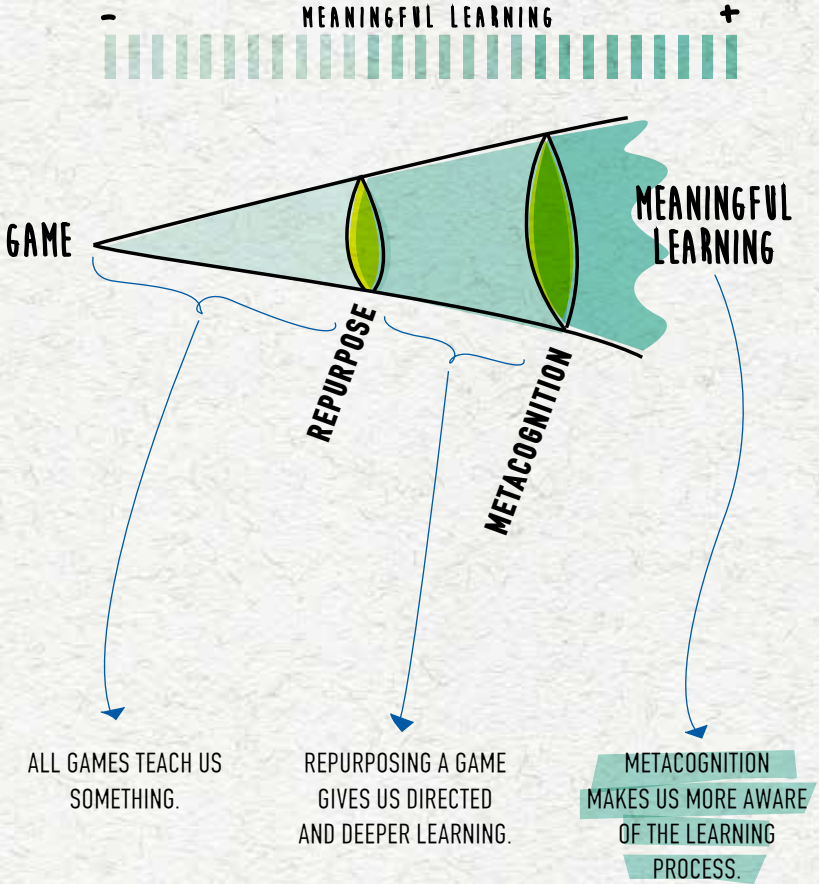
WHAT IS METACOGNITION AND WHY IS IT IMPORTANT?

IT'S THINKING ABOUT THE WAY WE THINK, BEING CONSCIOUS OF WHAT WE ARE THINKING AS WE ARE THINKING IT. IT'S HAVING KNOWLEDGE AND AWARENESS OF WHAT WE ARE DOING, WHAT WE ARE CAPABLE OF DOING, HOW WE JUDGE SITUATIONS, AND HOW WE MAKE DECISIONS.

To make learning and competency development more evident and comprehensive, it is vital to incorporate **METACOGNITION**.

In order to understand it better,
let's look at it this way:

LEARNING BY PLAYING:



PLAY ENHANCES
CREATIVE THOUGHT
FOSTERS TRUST

HELPS DEVELOP DIVERGENT
AND CONDITIONAL THINKING,
AND REDUCES STRESS

**ALL OF WHICH
CAN LEAD TO
INCREASED
LEARNING.**



"If you want
creative
WORKERS,

GIVE THEM  ENOUGH
TIME

to
play".

JOHN CLEESE




• JUST ONE •

game
CAN PROVIDE A

*
HUGE AMOUNT OF DIFFERENT
EXPERIENCES DEPENDING ON
THE CONTEXT IT IS PLAYED IN.
*





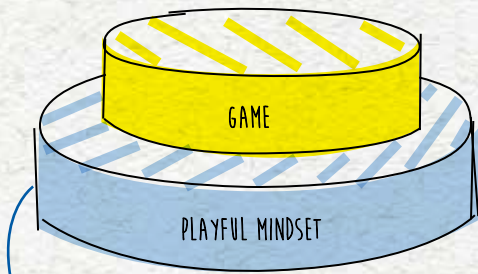
NOW WE ARE COMING
CLOSER AND CLOSER TO WHAT WE CALL THE

"PLAYFUL MINDSET"

Faculty with which we are born and that can be adapted to a range of contexts and stimuli. It also implies the act of playing, and the way we think and feel about it.

It is the capacity to be in a Flow State, where the challenges are up to the abilities of each person, causing her to be completely absorbed in the activity, losing even the notion of time.

There is a disposition to continuous improvement, a beginner's mindset open to new experiences, willing to learn and to be surprised. Who experiences it, is characterized by a positive state of mind and an intrinsic motivation, which is manifested in their corporeality.

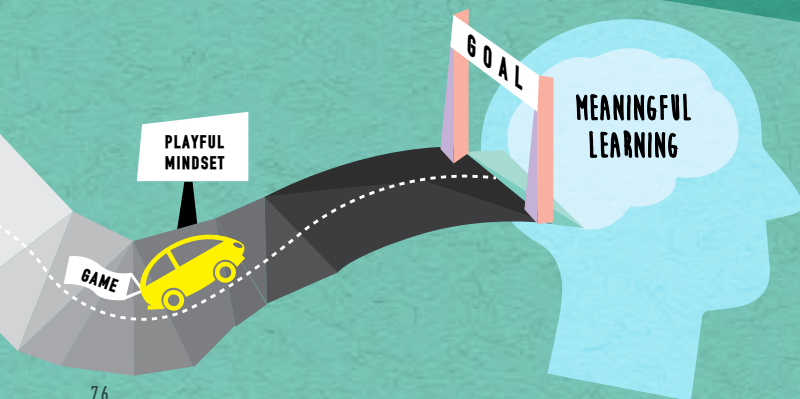


THE PLAYFUL MINDSET

allows us to live the experience of play. Everyone has it, but with the passage of time and due to personal decisions, we might use it in a higher or lower degree.

IT'S THE FOUNDATION OF ALL GAMES.

Meaningful learning is the goal. The way to get there is a Playful Mindset, and the vehicle we use is the game.



PLAYING IS AN ACTIVITY THAT TRAINS THE PLAYFUL MINDSET.

WHY DO WE DEFINE LEARNING BY PLAYING WITH A FOCUS ON THE PLAYFUL MINDSET INSTEAD OF ON THE ACT OF PLAYING



Because the range of activities that have been described as "playing" is very broad. In fact, two people can participate in the same experience without agreeing whether or not it is a game. So, although we can't define "game" so easily, we can identify whether or not we were playing.

When we listen to people who have been playing, they often talk about losing track of time. They become completely absorbed in the activity and enter into a Flow State.

Learning begins



IT'S A PROCESS THAT LASTS THE WHOLE EXISTENCE



AND INCORPORATES ALL THE ELEMENTS OF AN INDIVIDUAL.

◆ **THINKING, FEELING AND
PERCEIVING AS WELL AS BEHAVIOR.** ◆



THIS IS WHY WE TALK ABOUT
THE 3 PILLARS OF THE LEARNING PROCESS:

THE SKILL:

We must be able to reflect on our own skill level, to be aware of our competencies and to elaborate better ways to learn new things.

THE WILL:

We need the motivation that comes from new experiences and new ways of exchanging ideas.

THE THRILL:

Learning must be pleasant and gratifying.



Don't forget!

BOTH MEANINGFUL LEARNING AND COMPETENCY DEVELOPMENT
MUST BE UNDERSTOOD AS PROCESSES

THAT REQUIRE PRACTICE, INTERACTION,
REPURPOSED GAMES, AND, ABOVE ALL:

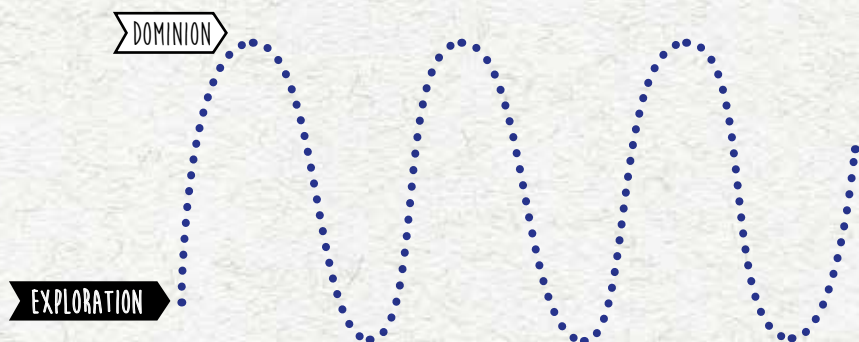


METACOGNITION.

WHEN WE PLAY A GAME FOR THE FIRST TIME,

our outlook is one of non-competitive **immersion**. As the game progresses, we gain knowledge and develop or strengthen skills, and we become **good at the game** and begin to experience an intense closeness to the context.

As we move from immersion to mastery of the game thanks to **better-developed skills, the challenge must increase**. When it does, we move back to the **immersion stage** and begin to **work our skills up to the next level**.



**TO MAINTAIN OUR
COMMITMENT TO THE
GAME, WE MUST
PASS THROUGH**

4 STAGES:

1. ATTENTION

the ability to concentrate, to be in a Flow State; that is to say, to strike a balance between skill and challenge.

2. CARE:

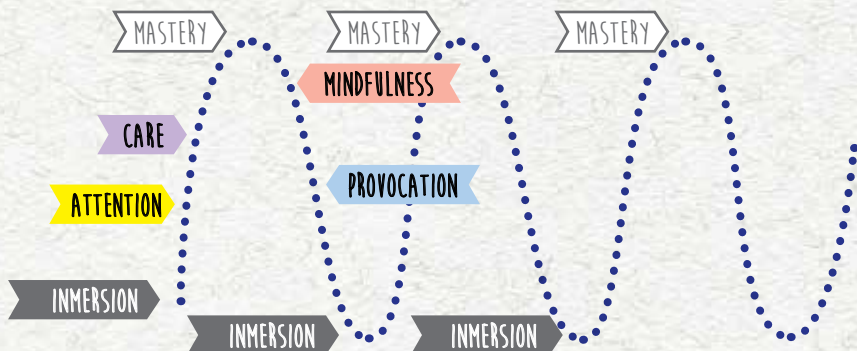
this helps us do things right, and to push our dominion to an above-average level.

4. PROVOCATION:

this helps us to disrupt the ways in which we see the world.

3. MINDFULNESS:

Allows us to adopt a beginner's mindset, exploring ideas without being restricted by what we already know.



WE SEE THIS EVERY TIME WE PLAY A GAME,
AS PLAY LEADS US TO EXPERIENCE A SERIES
OF PHENOMENA AND FEELINGS WHEREIN WE WILL
ALWAYS GO THROUGH THE SAME BASIC PROCESS:

UNCERTAINTY - FRUSTRATION

Players face an unknown situation where they cannot control the variables that come into play. This makes them uneasy, makes them feel challenged and, of course, frustrated and all the emotions that come with these sensations: nervousness, anxiety, apathy in those who are less tolerant to such conditions, and even aggressiveness in those who put up most resistance.

ANALYSIS - UNDERSTANDING

As the game instructions are given the players gain knowledge of the conditions of play. They study and observe the variables and, as a result, begin to understand what they need to do in order to advance through the game. At the same time, they begin to distance themselves from the initial uncertainty and fear. Players who have a deeper knowledge of the game begin to feel free to teach others what they have learned.

EMPOWERMENT - CONFIDENCE

After understanding the game, the players feel more comfortable with it and move from a position of understanding to one of strategizing and taking decisions on future actions. They trust the tools at their disposal to make progress in the game, understanding the ground they are walking on and losing their fear of failure, and gradually begin to have fun. It may be, in some cases, that the players begin to recognize certain skills in themselves and that they begin to use them consciously in order to progress.

ENTHUSIASM - COMPETITIVENESS

As the game reaches its peak, the players begin to experience the highest levels of entertainment. The foremost emotions at this stage are happiness and personal pride.

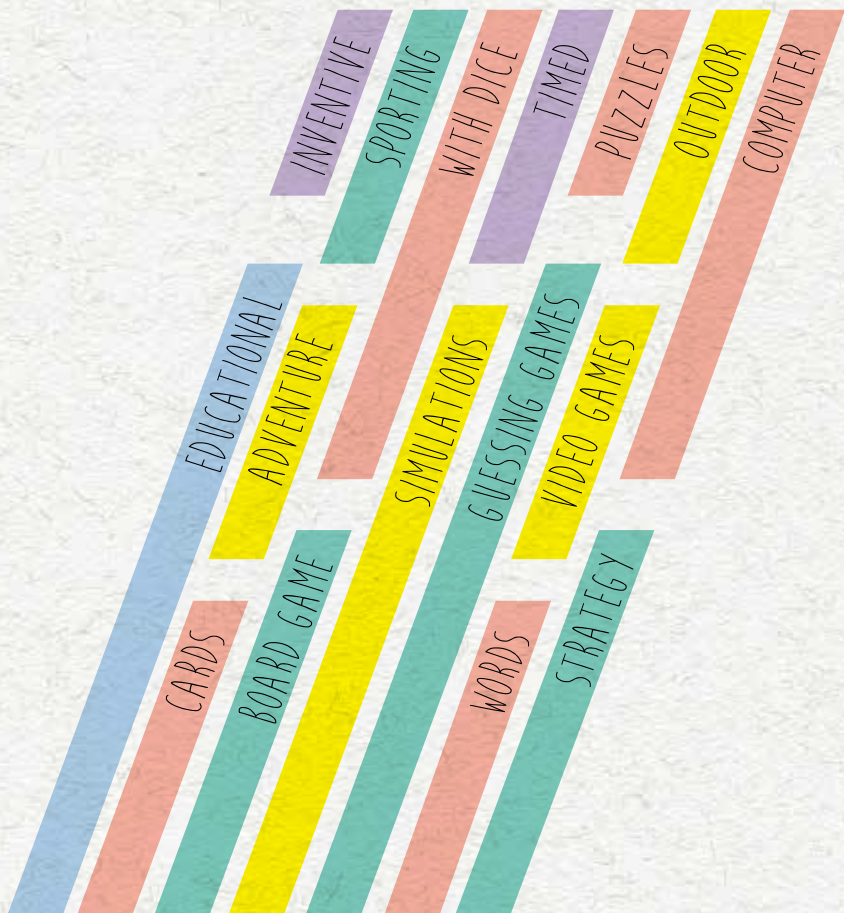
**WHAT
TYPES
OF GAMES
DO YOU
KNOW?**



**GRAB A PENCIL AND WRITE THEM DOWN
HERE BEFORE YOU CARRY ON READING.**

15 horizontal white rounded rectangular boxes stacked vertically, intended for writing notes.

HERE ARE OUR ANSWERS...

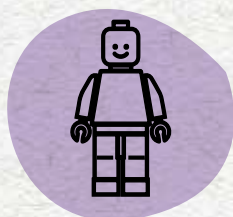


ACCORDING TO LEGO, THERE ARE 5 KINDS OF GAME:



PHYSICAL GAMES

These games involve physical activity. They are aimed at developing a child's physical abilities, such as coordination, strength and stamina.



OBJECT-BASED GAMES

They help children explore the world they live in. They develop thought processes and problem solving.



SYMBOLIC GAMES

These are games that help to express attitudes, ideas, feelings, and experiences through language, painting, drawing, collages, music, etc.



SOCIO- DRAMATIC GAMES

These include role plays, dressing up, and theatre, and focus on social and cognitive development.



RULE- BASED GAMES

These incorporate instructions that stimulate problem-solving, skill development, turn taking, and empathy.

GAMES CAN ALSO BE CLASSIFIED ACCORDING TO THEIR PURPOSE

GAMES DESIGNED FOR
ENTERTAINMENT AND
PLEASURE.

Serious games,
gamification
& learning based
in games

Games designed
for entertainment

GAMES DESIGNED TO REACH
A SPECIFIC OBJECTIVE.

"THERE'S NOTHING
TO BE LOST IN EDUCATION
WITH THE USE OF GAMES;

THERE IS MORE TO BE

LOST



IF THEY ARE NOT
INCLUDED.

SO,

NOW WE KNOW THAT A
GAME CAN BE A POWERFUL LEARNING TOOL:

WHAT DO WE LOOK
FOR WHEN CHOOSING A GAME?

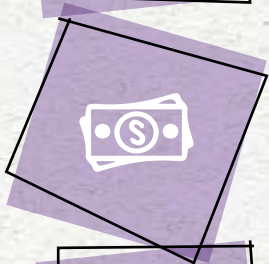
WHAT DOES
THE GAME TEACH?

ARE WE USING GAMES
THAT ENCOURAGE THE DEVELOPMENT
OF XXI CENTURY COMPETENCIES?

WE HAVE PROBABLY ALL
PLAYED AT LEAST ONE GAME
WHERE WE HAD TO...



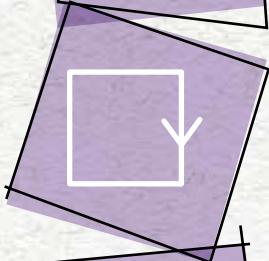
**MONOPOLIZE IN ORDER
TO WIN THE GAME**



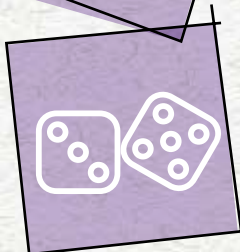
**EARN MONEY AS
THE ONLY WAY TO WIN**



**COMPETE WITH AND ELIMINATE
THE OTHER PLAYERS**



ONLY FOLLOW ONE PATH



**RELY ON LUCK IN ORDER
TO WIN**



BUT IN REALITY WE NEED PEOPLE WHO

- ★ Are motivated by achievement
- ★ Can identify new opportunities
- ★ Can use their initiative
- ★ Are innovative and creative
- ★ Can plan and are well organized
- ★ Have a high self-esteem
- ★ Are able to take risks
- ★ Are flexible
- ★ Are perseverant and disciplined
- ★ Are self-aware
- ★ Can lead
- ★ Are ethical

RECAPPING...

WHAT
DO YOU LOOK
FOR IN A GAME?

Although we have already stated that every game can teach you something, the chosen game and the way it is repurposed will be key when it comes to developing skills, attitudes, and knowledge.

SO,

HOW DO WE CHOOSE
THE RIGHT GAME TO TEACH
AND LEARN COMPLEX AND IMPORTANT
MATERIAL IN AN ENTERTAINING WAY?

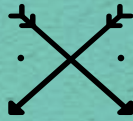


DO YOU KNOW ANY GAMES THAT DO THIS?

WHICH ONES?

TO REACH THIS GOAL,
WE RECOMMEND

EUROGAMES



— WHAT ARE THEY? —

Board games with simple rules and short turns that emphasize strategy over luck and conflict.

THEY ALSO HAVE:

— *Unusual themes* —

* A focus on exchange (the majority) *

•• SIMPLE MECHANICS BUT COMPLEX STRATEGIES ••

~ **COLORFUL COMPONENTS AND AN ATTRACTIVE DESIGN** ~

ANOTHER WAY TO DEVELOP OR STRENGTHEN
YOUR PLAYFUL MINDSET IS THROUGH GAMIFICATION. BUT,

What is gamification?

This is the incorporation of game mechanics
in other non-game-based contexts in order
to modify specific behaviors.

The objective is to generate positive experiences
through motivation and fun.

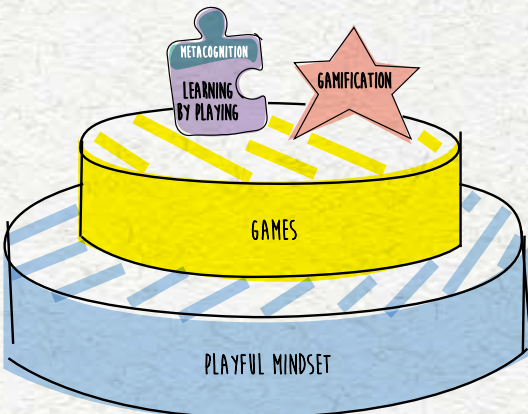
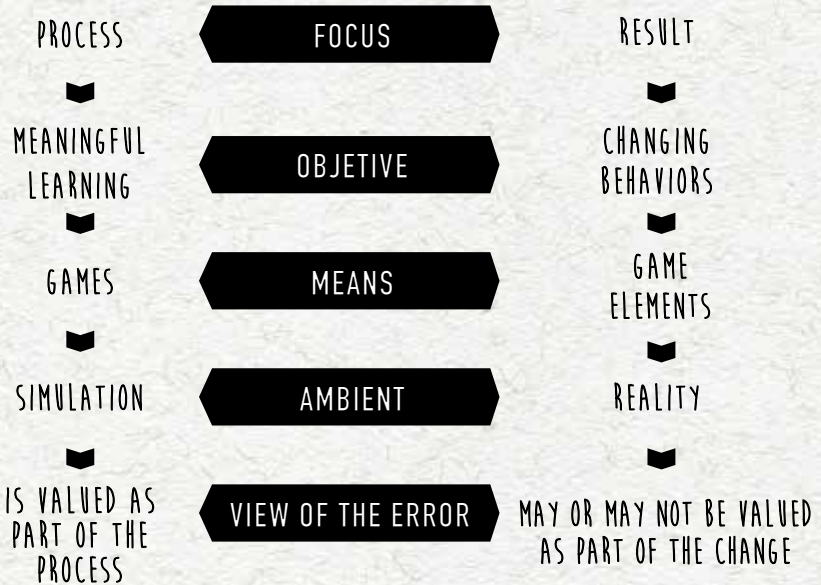
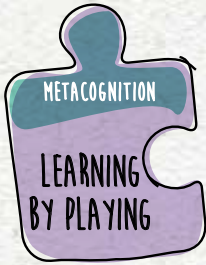
Some of the most frequently-used techniques
in gamification are the assignment of points,
the division of processes into levels with prizes
and recognition for meeting objectives, and the
inclusion of challenges and competition among
participants.



HOW DOES LEARNING
BY PLAYING DIFFER
FROM GAMIFICATION



IN COMPARATIVE TERMS...



So!

WHAT IS "TEACHING MATERIAL"?

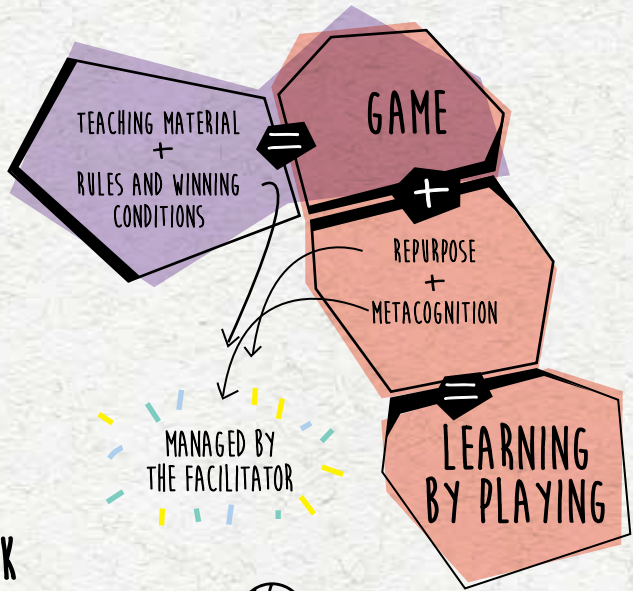


"Teaching material" is any resource used to facilitate the teaching-learning process, including images, physical objects, worksheets and videos among others.

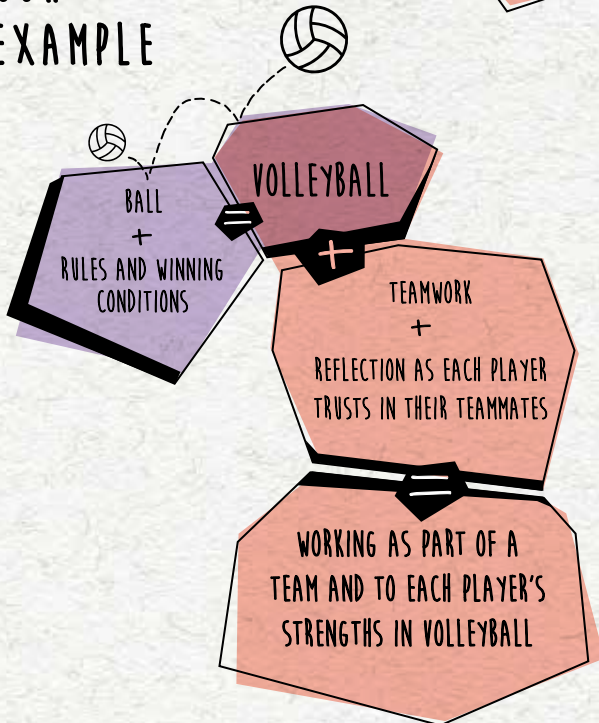


As such, teaching material can take on many forms spanning a wide range of formats and concepts.

How does Teaching Material relate to games and Learning by Playing?



LET'S LOOK AT AN EXAMPLE



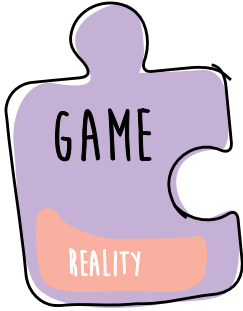
SO,

DEPENDING ON THE FACILITATOR AND THE CHOSEN TOOL,
THREE WAYS WE CAN STRENGTHEN OUR PLAYFUL MINDSET ARE:

LEARNING BY PLAYING ➡

GAMIFICATION ➡

TEACHING MATERIAL ➡



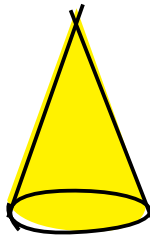
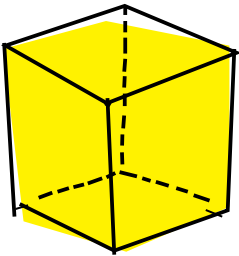
Adding elements of reality
to the game.

ALLOWS FAILURE AND LEARNING
IN A SAFE ENVIRONMENT WITHOUT
MAJOR CONSEQUENCES.



Adding game's elements
to reality.

ALLOWS TO MOTIVATE
A GROUP OF PEOPLE
IN PURSUIT OF A GOAL.



Physical or digital materials.

ALLOWS TO STIMULATE
SENSSES SUCH AS TOUCH
AND VISION.



RECOMMENDATIONS FOR CHOOSING A GAME AND LEARNING BY PLAYING

- + Provoke emotions, then learning will come naturally.
- + Choose a fun game. For that, the level of challenge has to be according with the players' competencies and age.
- + Strategy-based games allow for people with different levels of competency to interact.
- + Make sure there are ways you can modify or repurpose the game to change the scenario. Keep it novel.
- + You can get more from games that have several levels of challenges.

THINGS TO BE WARY OF WHEN CHOOSING A GAME FOR LEARNING BY PLAYING

- The more evident the learning aspect of the game is, the experience is likely to generate less emotions in the players.
- The more rules a game has, the more challenging and fun it will be. However, it will also be more difficult to teach.
- The more luck that is involved in the game, the more a player's strategy will revolve around the calculation of probabilities, meaning care should be taken if this is not the goal.

" *A man*
IS CLOSER TO
HIMSELF



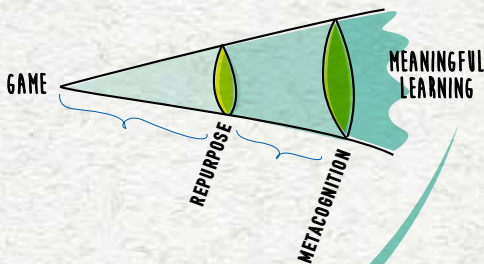
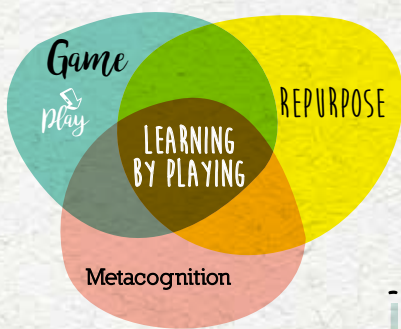
w h e n
HE IS ABLE TO ACHIEVE THE



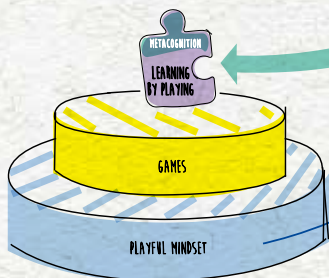
seriousness
of a child
at play."

HERÁCLITO

IN SUMMARY...



WE CAN ALL LEARN BY PLAYING,
BECAUSE WE ARE ALL BORN WITH
PLAYFUL MINDSET

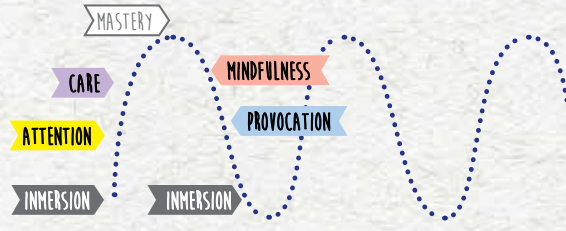


IT'S THE
FOUNDATION
OF ALL GAMES

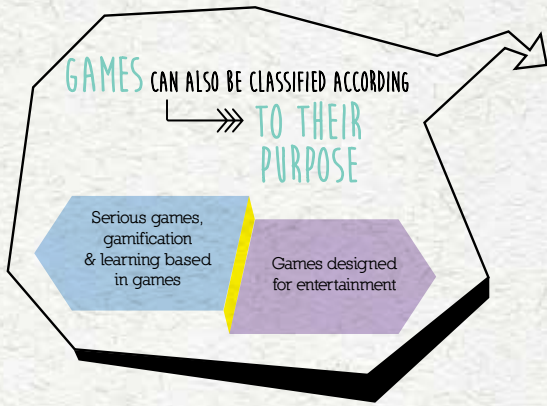
PILLARS OF LEARNING PROCESS



STAGES TO MAINTAIN A COMMITMENT TO THE GAME

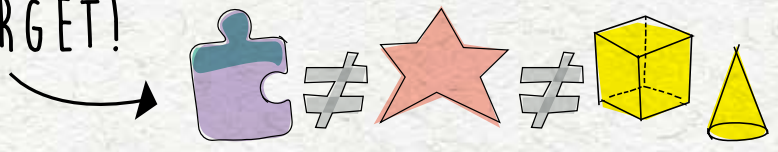


EMOTIONAL PROCESS WHILE PLAYING



WE RECOMMEND EUROGAMES FOR MORE COMPLEX COMPETENCIES

DON'T FORGET!



NOW

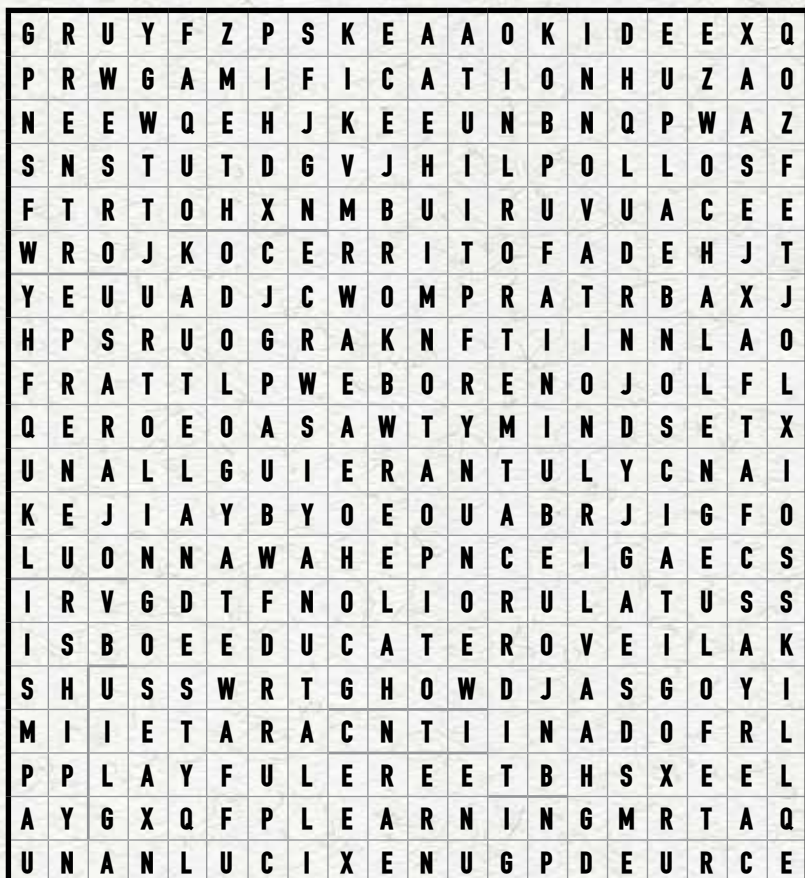
we'd like to invite

YOU TO RELAX AND

play

WORD SEARCH

TRY TO FIND
THE 10 CONCEPTS WE HAVE SEEN SO FAR.



We'd like to invite you

TO LIVE THE EXPERIENCE

LEARNING BY PLAYING

To help you visualize everything we've seen so far,
**WE WILL DESCRIBE A NUMBER OF
DIFFERENT GAME-BASED EXPERIENCES**
you can carry out with friends, at work, or with students, wherein you can
re-purpose a game to reach any learning objective you like.

**WE WANT TO PUT GAMES
BACK ON THE TABLE.**



**WE WANT A SOCIETY THAT
HAS THE TOOLS TO TACKLE PROBLEMS
WITH A PLAYFUL MINDSET.**



**WE WANT TO SHARE EVERYTHING
WE KNOW ABOUT LEARNING BY PLAYING,
AND SHOW THE POTENTIAL
THAT AN ACTIVE LEARNING
TOOL CAN REACH WHEN IT HAS
BEEN RE-PURPOSED.**





BUT BEFORE WE MOVE ON, RIGHT NOW,
•
DO YOU HAVE A BEGINNER'S MINDSET?
•
IS YOUR MIND OPEN TO LEARNING NEW THINGS?
•
ARE YOU PREPARED TO MAKE MISTAKES, TO FALL,
AND TO GET BACK UP AGAIN AS MANY TIMES
AS NECESSARY?

IF YOU ANSWERED
"YES"
TO THOSE
QUESTIONS...

EXCELLENT!

Let's get practical.

In any activity that we need to tackle, there are a number of basic conditions that must be met.

WHAT DO WE MEAN?

That there is a necessary level of knowledge, skills, and attitudes that the person who is leading the activity, from here on "the facilitator", must have in order to choose and use the methodology they believe to be most appropriate.

For any game,
it's also a necessary condition

for everyone

to learn how to play.

BUT HOW DO WE TEACH
A GAME TO A LARGE GROUP
OF PEOPLE?

The facilitator



Employs motivational
and challenging strategies so that
the participants in the game-based
experience can begin to learn on
their own.



THE FACILITATOR IS NOT THE ONLY SOURCE OF KNOWLEDGE,
AND IS THEREFORE NOT THE ONLY PERSON WHO TEACHES THE REST.

THE PERSON WHO
CHOOSES AN
ACTIVE
METHODOLOGY
IS CHOOSING:

- To be a facilitator, and to take a back seat, to become a flexible and trustworthy leader.

- To recognize that their own learning process is also continuous.

- To empower participants both as learners and teachers.

OF THE ACTIVE
METHODOLOGIES,
THE PERSON WHO
CHOOSES
LEARNING BY
PLAYING
IS CHOOSING:

- Quality of experience and entertainment → To tackle the fact that boredom and demotivation are the two main causes of desertion.

- The scalability factor → Games are less expensive than other methodologies when working with large groups.

- To base learning on pre-existing structures within everyone → the Playful Mindset.

It is vital
TO CREATE NEW!



CONTEXTS THAT ARE UNKNOWN

EVEN TO THE FACILITATOR,

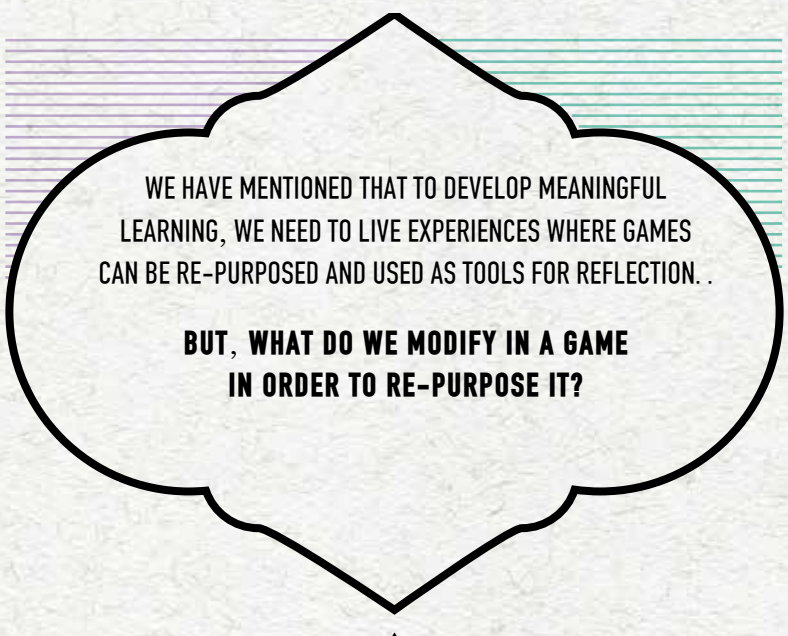
☞ TAKING THE PLAYERS TO AN ☞

open
world

WHERE THEY SET




THEIR OWN LIMITS.



WE HAVE MENTIONED THAT TO DEVELOP MEANINGFUL
LEARNING, WE NEED TO LIVE EXPERIENCES WHERE GAMES
CAN BE RE-PURPOSED AND USED AS TOOLS FOR REFLECTION. .

**BUT, WHAT DO WE MODIFY IN A GAME
IN ORDER TO RE-PURPOSE IT?**



HAVE YOU EVER CHANGED AN ASPECT
OF A GAME IN ORDER TO MAKE IT MORE ACCESSIBLE,
ENTERTAINING OR CHALLENGING?

HOW DO WE RE-PURPOSE A GAME?

IN THE FIRST
INSTANCE,

WHEN WE RE-PURPOSE
A PLAY-BASED EXPERIENCE, WE MUST
PRIORITIZE PLAYABILITY BASED ON THE
OPTIONS AVAILABLE TO US IN THE GAME.

IF YOU WANT TO GO DEEPER,
YOU CAN MODIFY THE GAME CONDITIONS AND EVEN INCORPORATE
NEW ELEMENTS.

Maximize playability
based on the options
provided in the game
manual.

Modify conditions
that change the game
rules.

Incorporate new
elements that change
the usual gameplay.

SO,

WHAT OPTIONS
ARE AVAILABLE?



WHAT IS EACH
ONE FOR?



WHAT IS THE LEARNING
OBJECTIVE IN EACH CASE?

THE ANSWERS
TO THESE QUESTIONS
DEPEND ON THE GAME SELECTED.
TO TACKLE THEM IN A CONCRETE WAY,
LET'S LOOK AT THE CASE OF

"EL PLAN: THE ADVENTURE OF ENTERPRISE".

LET'S RE-PURPOSE!

WHAT CAN WE DO?

LEVELS

Progressively incorporate different elements of the game in order to generate gameplay that has varying levels of challenge and difficulty.

I

LEVEL I: is the representation of a basic company, with a minimum level of specialization, in which all the tasks are carried out internally.

II

LEVEL II: simulates a normal business run under market conditions. There is a certain degree of specialization that opens up the possibility of value creation, meaning it is vital to detect opportunities based on one's own characteristics. This allows players to see that cooperation and competition are possible and necessary for development and opportunity creation.

III

LEVEL III: presents the challenges that an entrepreneur or business person faces day to day, with a high degree of uncertainty and scarce resources. This allows players to realize the consequences of their decision and the opportunity cost associated with an enterprise and value creation.

WHAT DO WE WANT TO MODIFY?

MODES

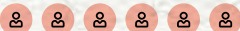
Changing the way in which players interact during the game, providing different incentive systems.



INDIVIDUAL: encourages each individual in a personal way, appealing to the challenge of performing well as a result of good decisions and a complete strategy. Natural competition that arises among players leads to them taking risks in order to perform better.



SHARED: negotiation and the capacity to reach agreements are the main characteristics of this dynamic. A constructive atmosphere is generated to demonstrate the complexity of dealing with different opinions and a lack of resources in everyday life.



TEAM: this dynamic offers alternatives that encourage collaboration and decisions taken by consensus involving all participants. It poses more demands in the development of communication, coordination, and leadership skills.

VARIABLES

Altering elements or rules of the game to affect the conditions under which regular game play takes place.



TIME: the goals of the game are maintained, but in a reduced timeframe implies a challenge in terms of decision making. Playing under pressure brings us closer to the tensions that we face in the real world.



NUMBER OF TURNS: reducing the number of turns in a game means every decision has a greater impact on the results. It brings us closer to experiencing the differences between short-term, medium-term, and long-term goals.



SORTING THE DECKS: sorting the different decks generates specific scenarios to develop targeted abilities. Adverse or unfavorable situations may occur in which observing people's behavior is useful for metacognition.

WHAT DO WE NEED TO INCORPORATE?

RULES

Recreating different ways of playing by means of new rules added to the game's original rules.



POSITIONS: devising a strategy, thinking of the best course of action, having everything planned and then having to change positions with another person and take up their game is definitively a situation in which frustration, tolerance and flexibility are fundamental and put to the test.



ROLES: beginning a game with a pre-set scenario, different to that of the other participants, generates many different feelings. The strategies to diminish the disparity created by the predetermined differences become highly challenging.



VICTORY POINTS: incorporating a different way to create value (and to generate innovative ideas) in the game allows players to visualize the relevance of different business models as they create sustainable and profitable enterprises.

ELEMENTS

This consists of the creation of new components (pieces and parts) to make games more challenging and less predictable.



LOANS: learning to invest and taking calculated risks to take advantage of opportunities is the purpose of incorporating the concept of debt. An investment loan is different from a consumer loan, and by playing we can learn to differentiate each one and to use them appropriately.



INVESTMENT CARDS: diversifying the alternatives and forms of investment opens more and better spaces to innovate together with the strategic use of resources and technology. At the same time, it broadens the range of options in the game, making it more attractive and less predictable.



EVENTS: incorporating the variant that events can be "potentially" positive, negative, or neutral is an excellent option because everything depends on the situation in which an event occurs and what effects it generates for the players and the game dynamics.

IN THIS WAY WE
DISCOVERED

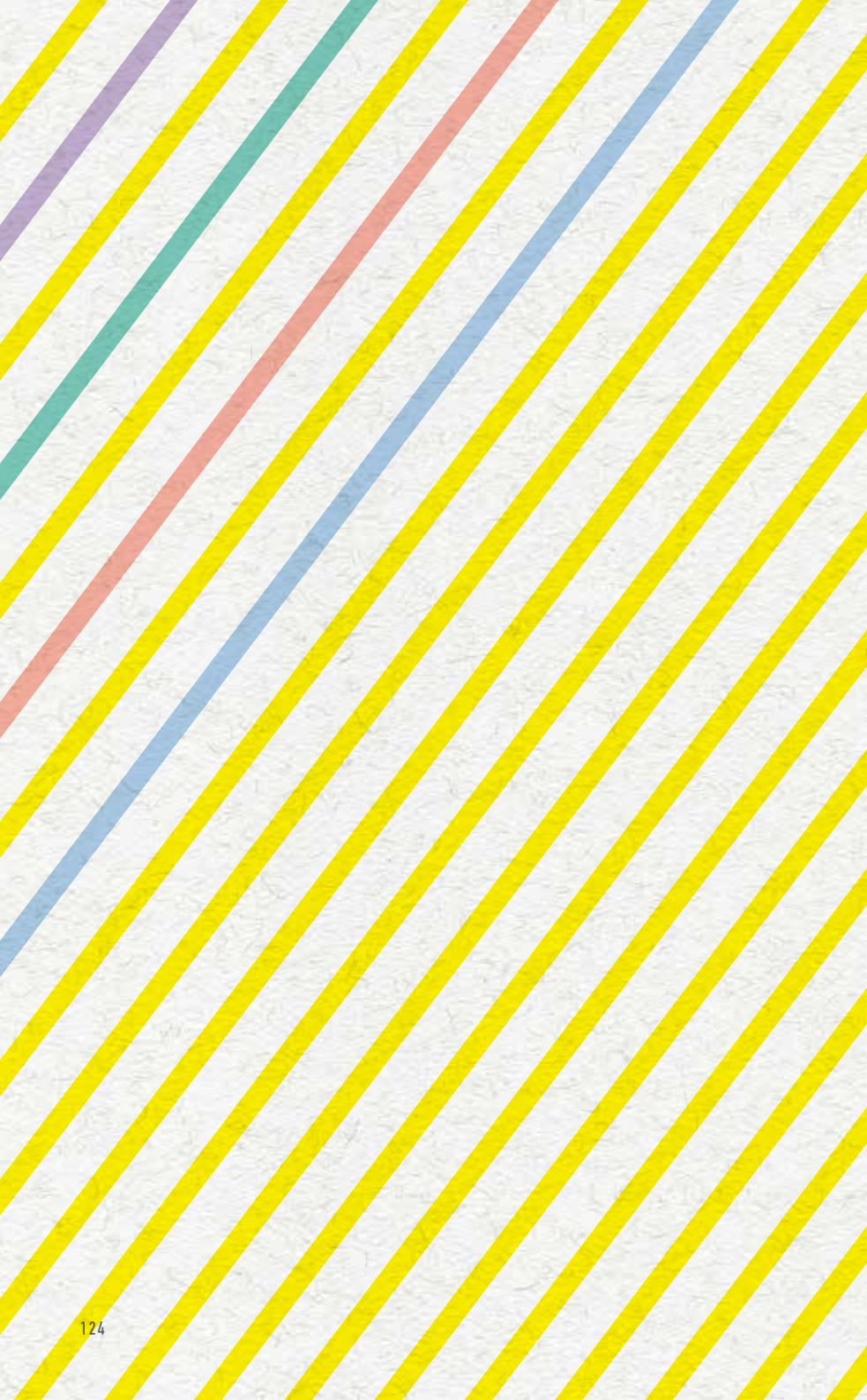


THAT AS YOU DEVELOP AND WORK
ON A GAME'S "PURPOSE".



**YOU JUST MIGHT
THINK OF ANOTHER
ONE!**





NEXT,
USING OUR EXPERIENCE AND TOOLS,
WE WILL SHOW YOU SOME ALTERNATIVES
FOR "REPURPOSING" THE DEVELOPMENT
OF SKILLS, ATTITUDES, AND KNOWLEDGE.

WE WILL USE THE FOLLOWING EUROGAME-TYPE GAMES:

- FINANCITY: ORGANIZE YOUR MONEY
- EL PLAN: THE ADVENTURE OF ENTERPRISE
- EL PLAN: YOU DECIDE

ACTIVITIES AVAILABLE ON THE PLATFORM LUDUTECH ACADEMY

 [ACADEMY.LUDUTECH.COM](https://academy.ludutech.com)

DESCRIPTION

FINANCITY:

ORGANIZE YOUR MONEY

www.juegofinancity.cl

The game simulates the process of managing domestic finances with all of the variables that come with it:

- Planning income and expenses
- Deciding when and how to invest
- Dealing with unforeseen events
- Balancing health and wellbeing

LEARNING CURVE



EL PLAN:

THE ADVENTURE OF ENTERPRISE

www.juegoelplan.cl

The game allows players to experience the emotional states of a person who decides to start their own company:

- Uncertainty - frustration
- Analysis - understanding
- Empowerment - confidence
- Enthusiasm - competitiveness

LEARNING CURVE



EL PLAN:

YOU DECIDE

www.juegoelplantudecides.cl

The game perfects technique and demonstrates the complexity of the many variables that must be handled to create high impact results:

- React promptly to change
- Make decisions under pressure
- Cooperate to compete
- Choose the right financing options

LEARNING CURVE



LEARNING OBJECTIVES

- **How to use money responsibly**
- How to draw up a budget
- The risks of over-indebtedness
- Responsible shopping
- How to deal with financial institutions
- The importance of savings
- How to analyse and make decisions

CONCEPTS INCLUDED IN THE GAME

- Wealth • Savings • Banking • Scholarships
- Wellbeing • Bonus • Shopping • Opportunity
- Cost • Credit • Debt • Education • Cash
- Efficiency • Scarcity • Expense • Overtime
- Unforeseen events • Income • Interest
- Investment • Market forces • Supply
- Repayments • Pricing • Budgets
- Insurance • Overindebtedness • Value

- **How to identify opportunities**
- How to strategize
- How to take risks
- How to deal with scarcity
- Flexibility in the face of change
- How to take responsibility for your decisions
- Motivation to succeed

- Management • Manufactured goods • Buying
- Opportunity cost • Economic crisis • Tax returns
- Scarcity • Export • Import • Exchange • Investors
- Logistics • Marketing • Raw material
- Market forces • Loss • Supply • Pricing
- Processes • Production • Products • Recession
- Resources • Insurance • Services • Subsidies
- Value • Sale

- **Value creation**
- Entrepreneurial skills
- How to structure a business model
- Strategic investment
- Efficient loan management
- How to create a competitive advantage
- How to improve productivity

- Installed capacity • Idle capacity
- Productive capacity • Working capital
- Capitalization • Competitiveness • Value creation
- Economies of scope • Economies of scale
- Efficiency • Specialists • Cash flow
- Excess capacity • Innovative idea • Infrastructure
- Investment • Business model • Opportunity
- Productivity • Profit • Return on investment
- Events • Technology

FOR ALL THE EXPERIENCES EXPLAINED IN THE COMING PAGES, IT IS IMPORTANT TO CONSIDER THE FOLLOWING

Do not forget that to carry out these activities, you and the players must know how to play the games we are proposing. If you do not know how to play, you can read the manual or enter the webpage for each game to see the explanatory videos.

1. FinanCity, organize your money: www.juegofinancity.cl
2. El Plan, the adventure of enterprise: www.juegoelplan.cl
3. El Plan, you decide: www.juegoelplantudecides.cl

To establish the correct expectations, before beginning the game, tell the participants about the experience, what is expected of them and the most important thing:

PREPARE FOR AN UNFORGETTABLE EXPERIENCE!

WHAT DO YOU THINK OF STARTING THE CONVERSATION LIKE THIS?



WHAT IS THE EXPERIENCE ABOUT?

In the first place, playing! Having fun. And in the course of the activity to develop competencies such as flexibility, problem solving, the identification of new opportunities, frustration tolerance, and effective communication, while acquiring concepts relevant to the game being played.



WHAT IS EXPECTED OF THEM?

To have fun, to have a pleasant experience, and to get carried away by the playful mindset. They should be willing to learn and to see failure as a fundamental part of the process.



DURATION:

In general, each game session lasts around 60–80 minutes, but do not forget that the analysis and conversation during and after the game are fundamental to achieving metacognition and meaningful learning.



IDEAS TO STIMULATE PARTICIPANTS' METACOGNITION DURING AND AFTER THE GAME:

- What emotions did you see in yourself and your partners?
- Were there common emotions among the players?
- Was there any emotion that was significant for you?
- Did you feel a new emotion?
- Did you see an emotion that's common in you, that marks your everyday behavior?
- What strengths and weaknesses did you perceive in your performance?
- Was your performance different from what you hoped? Why? Was it because of external or internal factors? What were they?
- How do the decisions that you make when you are calm, challenged, or entertained differ? What about when you are angered, furious, or envious?
- Bearing in mind that we will play this game again, which skills would you like to work on?



POSSIBLE WAYS TO WORK METACOGNITION:

- Writing about the experience (individual work)
- Conversations in pairs
- Group conversations
- Recreating the experience through acting
- Meditation

This is an excellent instance for the participants to identify in themselves skills, attitudes and emotions that arise in complex situations. In case that they don't have a wide range of vocabulary about emotions and feelings, we recommend you give them definitions and to share them as they are observed in the game session; for example, what it means to feel joy, anger, frustration, being perseverant, etc.

It is important to be careful when applying metacognition during the game, since interrupting an emotion can be a very delicate process. You need to know the players well, and to use caution and empathy. For that reason we recommended applying metacognition after the game.



REP UUUUUU

UUURPOSE ME



1. IDENTIFYING OPPORTUNITIES

Intention:	Promoting the development of flexibility, problem solving, planning and organization
Game used:	El Plan: the adventure of enterprise
Level of the game:	II
Dynamic:	Individual
Modified variables:	Number of turns and sorting of the decks

We challenged ourselves as a team to repurpose the game so that the experience emphasized the development of flexibility, problem solving, planning and organization. To achieve this, we decided to modify the structure of the fundamental elements of the game, by shortening the number of turns to 6 (originally there are 12) and fixing the order of the decks, both investments and events.

We also decided to play at level II, where there is a scenario in which, unlike at level I, interaction between the players and the market is required to reach optimal individual performance, allowing for collaborative competition.

TO START PLAYING, SET UP THE BOARD WITH DECKS IN THE FOLLOWING ORDER:

EVENTS

- Economic crisis
- Planting season
- Seed city on strike
- Energy rationing
- Recession
- Natural Disaster

INVESTMENT

SPECIALISTS:

- Business manager
- Engineer
- Business manager
- Designer
- Publicist
- Sportsperson

TECHNOLOGY:

- Innovative packaging
- Mobile telephony
- Innovative packaging
- Machinery
- Mobile telephony
- Machinery

INFRASTRUCTURE:

- Corporate building
- Office
- Workshop
- Tools
- Workshop
- Office



RESTRICTION

The decks are ordered so 6 players can play.

Ordering the decks like this seeks to generate a gameplay scenario conditioned by the permanent shortage of resources and the occurrence of events with adverse effects for the players. Identifying opportunities under those scenarios is fundamental to performing well.

As a facilitator you must keep an eye on the emotions that the players are experiencing, such as frustration, envy, and listlessness, looking for the spaces during the game to make them evident in an empathetic, constructive way.

OPTIONAL CHALLENGE

Let's turn a problem into a challenge, and challenge it into an opportunity: if you want it to be more complex, add the condition that each player make at least one innovative idea.



CLOSING:

Invite the players to share what they took from the experience in one sentence. If you want help with the definitions and descriptions of competencies and emotions, you can go to the glossary in the back of the book.

Were you able to identify opportunities? Give an example. What information was useful in helping make decisions? Were opportunities identifiable at a glance or was a deeper analysis needed? Give an example.

AFTER HAVING EXPERIENCED THE ROLE OF FACILITATOR,
WHICH EMOTIONS COULD YOU IDENTIFY
IN THE PLAYERS?

WHICH EMOTIONS AROSE IN YOU
AS THE GAME'S FACILITATOR?

2. ACHIEVEMENT OF TEAM OBJECTIVES

Intention: Experiencing situations where you need to negotiate, have clear goals, communicate effectively, lead, and be pro-active.

Game used: El Plan: the adventure of enterprise

Level of the game: III

Dynamic: Team

After playing the game El Plan many times with an individual focus, we saw the need to repurpose it to deal with the individualism of players' decision-making processes and the fact that many people remained silent when they saw that other players had made mistakes, or were not collaborative and efficient.

We decided to play at level III, since each decision has a greater impact. It closely represents the scenarios faced by an entrepreneur in the value creation process.

But how we do it so that each player's decisions affect others both positively and negatively?



GROUP CHALLENGE

Play first individually, trying to make as many victory points each as possible. Then play as a team, where it is no longer important who is the individual winner, and add the total points scored together. Were there more points in the individual game or in the team game?

Tell the players that they can share and match their game strategies to achieve the proposed goal, respecting the same rules in both modes.

WHO TOOK THE LEADERSHIP ROLE IN THE GROUP?
DID EVERYONE GIVE AN OPINION OR DID ANYONE
REMAIN SILENT MOST OF THE TIME?
WAS ANYONE ANGERED BY THE DECISIONS MADE?

WHAT IF YOU ASK THEM THAT THEY CHANGE SEATS?

SINCE THEY ARE PLAYING IN TEAMS,
SHOULD THEY MIND AS THERE
IS A COMMON STRATEGY?

WHAT EMOTIONS DO YOU OBSERVE?

OPTIONAL CHALLENGE

If you want to go a step further, you can add the condition that all the players at the table must obtain at least two victory points each.



CLOSING:

A good subject to approach for closing the game session is to ask the players: How much did they work in a team? Did they really work in a team or did each player do one part of the work or activity? How did it feel to work in a team? Did they feel more confident working in a team? Did they feel uncomfortable?

You can invite them to describe what their attitude will be like the next time that they carry out a group activity. Ask them to write it down on a post-it and stick it in a visible place.

If you want help with the definitions and descriptions of abilities and emotions, you can go to the glossary in the back of the book.

3. DECISION MAKING

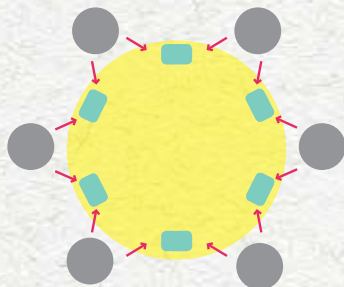
Intention:	Viewing and incorporating all the variables, situations, emotions and relationships that influence the decision-making process, specifically addressing negotiation and conflicts of interest.
Game used:	El Plan: the adventure of enterprise
Level of the game:	II
Dynamic:	Shared
Modified variables:	Ordering the decks
Included instruction:	The game is won by whoever first generates a combined 5 victory points across their two El Plan cards.

Justifying decisions can be even more difficult than making them. This is why, after playing in different ways, we decided that we were prepared to support our decisions with consistent arguments, developing effective communication, critical thinking, respect for others and their opinions, collaboration, and social competencies.

For this, we decided to play at level II again, in order to achieve more fluency in the game and keep the focus on the arguments, favoring communication and negotiation.

What do we mean when we say that the game is shared and whoever gets 5 victory points across their two cards wins?

It means that each player has two El Plan cards, one that is shared with the partner to their left, and another that is shared with the partner to their right. This way, each player must negotiate with the co-owner of each card the decisions to make, considering that the ultimate decision will influence the scenario of the other El Plan card.



Thus, to win you need to negotiate with both players, the one to your right and the one to your left, as you need to score 5 points across both enterprises.

TO HAVE A BETTER EXPERIENCE, THE DECKS SHOULD BE ORDERED AS FOLLOWS:

EVENTS

- Economic growth
- Bank offers new loans
- Natural Disaster
- Tax returns
- Training franchise
- Energy efficiency plan
- Recession
- Planting season
- Energy rationing
- Seed City on strike
- Stock market crash
- Seed City works happily

INVESTMENTS

SPECIALISTS

- Engineer
- Designer
- Sports person
- Business manager
- Sports person
- Business manager
- Publicist
- Investor
- Publicist
- Engineer
- Designer
- Economist
- Risk analyst

TECHNOLOGY

- Machinery
- Mobile telephony
- innovative packaging
- Machinery
- Mobile telephony
- innovative packaging
- Broadband Internet
- Recycling
- Robot
- Broadband Internet
- Risk prevention officer
- Solar panels
- IT

INFRASTRUCTURE

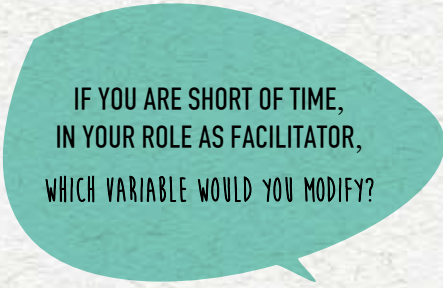
- Corporate building
- Office
- Tools
- Office
- Advertising poster
- Laboratory
- Freight vehicle
- Tools
- Workshop
- Freight vehicle
- Warehouse
- Workshop
- Industry

As a facilitator, we recommend emphasizing the players' level of flexibility and adaptability, their empathy in communicating their points of view, and how they handle frustration.

DID ALL THE PLAYERS HAVE A POINT OF VIEW
TO DEFEND WHEN NEGOTIATING?

•
WAS THERE ANY ONE DOMINATING
CONVERSATIONS AND DECISION MAKING?

•
WERE PERSUASIVE ABILITIES DEVELOPED?
WHICH WAS THE MOST OBSERVED FEELING?



IF YOU ARE SHORT OF TIME,
IN YOUR ROLE AS FACILITATOR,
WHICH VARIABLE WOULD YOU MODIFY?



CLOSING:

We think it is important that you show the players that the feelings, emotions, and competencies developed and demonstrated in the game are also part of daily life. For this you can ask them to identify the 3 main situations in which they were tense and how they dealt with them. Later, you can ask them to reflect on: in which other daily situations have they felt the same way? In what other aspects of their lives do they have to persuade or dissuade people? Is this difficult for them? Which negotiation tools did they learn that can be used for everyday life? If you want help with the definitions and descriptions of abilities and emotions, you can go to the glossary in the back of the book.

TAKE A *few minutes*



CHALLENGE YOURSELF, TEST, AND REHEARSE

WHAT IF WE HAVE JUST A SHORT TIME
TO TEACH TO PLAY AND WE WANT TO STIMULATE
THE DEVELOPMENT OF THE COMPETENCIES OF WORKING
UNDER PRESSURE, FRUSTRATION TOLERANCE, LEADERSHIP,
AND ASSERTIVE COMMUNICATION?

Pia Wiche took on this challenge, using the game
El Plan: you decide, in "Leader Mode".

In order to play, one requires the tutorial that comes with the game,
and the erratum available on the game's webpage.

After forming groups of 4 people, the group chooses a leader who must fulfil the
following requirements (the instructions are only given to the leaders):

1. Only the team leader will be able to read the instruction manual of the game
2. The leader will tell each member of the group what to do.
3. No member of the team will be able to do anything
unless told to by the team leader.
4. The team leader may NOT play the game.

The rest of the players are told that they must complete the tutorial in 60
minutes. There must be instructors during the sessions that, with a hard,
critical, arrogant and demanding attitude, press the players to follow the
instructions and the tutorial, making reference to the remaining time.

How did each group handle the irregularity of the information provided?
What was the leader's attitude? How were the conflicts resolved?
How did players deal with anger and frustration?

4. INEQUITY AND LACK OF OPPORTUNITIES

- Intention: Empathizing with others by showing the differences in financial behaviors of certain stereotypes
- Game used: FinanCity: organize your money
- Included instruction: Each player has different rules

One of the real-life variables that FinanCity does not tackle is showing the different realities that each individual lives through. We are not born into the same family, we do not have the same traditions, and we are not born with the same socioeconomic background. Because of this, we looked for the way to show different realities and personal economic scenarios within the game. For this, all players will begin with a different condition:

1. ANTI-LOANS

The player cannot request a loan throughout the game, unless the cards say otherwise.

2. NO ACCESS TO HIGHER EDUCATION

The player cannot invest in education throughout the game.
They are not required to have an education card to win the game.

3. FOCUS ON STUDIES

Starts the game with 2 loans (12 repayment tokens)

- a. The money from those loans (investment money) is separated from the rest of the player's money and can only be used to invest in education.
- b. If the player has investment money placed in education by the end of the game, he loses it. During the first 3 turns he is forced to place himself in the education box and is forced to invest in a card.
- c. If he spent all of the "investment money" before the third turn, he can continue with the game as normal, without the obligation to place himself in the education box.

4. SHOP 'TILL YOU DROP

- Starts the game with 1 loan.
 - The money from that loan is separated from the rest of the player's money and can only be used to spend on shopping.
 - If he still has shopping money left by the end of the game, he loses it.
- During the first 5 turns the player is forced to position themselves in the shopping box and is forced to buy at least one card per turn.
 - If he spent all of the "shopping money" his fifth turn, he can continue playing the game without the obligation to position themselves in the shopping box.
- If he requests a loan he cannot use that money to invest in education.
- He has 2 "leeway turns"; that is to say, during the first 2 turns he can choose not to pay his repayment tokens.
- He can buy all of the shopping cards he wants in a turn.

5. THE GUARANTOR

- Starts the game with 9 repayment tokens.
- Has 2 "leeway turns". That is to say, during the first 2 turns he can choose not to pay their repayment tokens.
- He must pay off at least 1 of their "pre-existing debt" tokens per turn. (that is to say, he does not follow the rules stated in the minimum repayment tokens table).
- If the player asks for an additional loan, it follows the rules of the minimum repayment tokens table.

6. THE WORKAHOLIC

- The player cannot be positioned in the wellbeing box.
- He can only access wellbeing through shopping.
- When positioning themselves in the "Overtime" box, he receives \$100 instead of \$80.



RESTRICTION

The game is played without the "Loss of wallet" unforeseen event so as not to hinder the consumer's gameplay.

~~~~~  
**Before starting to play, ask the players if they identify with one of the 6 situations in particular. What do they feel about that? Do they have any preference?**  
~~~~~

CHALLENGE

In this particular case a winner is not expected, since the initial conditions are different for everyone, but we believe that there is great value in drawing a parallel between what happens in the game and real life. Metacognition is key!

IN REAL LIFE,
ARE THERE ANY "WINNERS" DESPITE
THE DIFFERENT SCENARIOS?



CLOSING:

It is fundamental to take into consideration the players' emotions, from the moment the different stereotypes are presented, to when they are assigned or choose one, and on until the end of the game. You can approach them with questions such as: do you like your current situation? What would you do to change the country's current situation? How can we collaborate to lower the gap among the different contexts?

If you want help with the definitions and descriptions of abilities and emotions, you can go to the glossary in the back of the book.

TAKE A
few minutes



CHALLENGE YOURSELF, TEST, AND REHEARSE

IF WE WANTED TO ENCOURAGE SOLIDARITY
AND FELLOWSHIP AMONG PEOPLE,
what could we do?

What would happen if when playing FinanCity the players are told to play normally, but at the end of the game they all have to meet the minimum victory requirements so that someone can win?

What happens when incorporating conditions that promote collaboration?

What is the reaction of the best player?

5. BUSINESS MODEL

Intention:	A practical demonstration of a business model
Game used:	El Plan, you decide
Level of the game:	I
Dynamic:	Individual
Included instruction:	Alternative requirements to make an innovative idea
New element:	New events are added

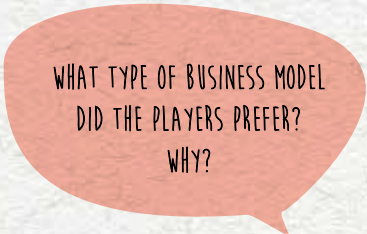
Now the challenge was different: how to practically demonstrate what a business model is to undergraduate students.

That was Pía Wiche's (Chile) and Pablo Becerra's (Chile) challenge, both 2016 Learning by Playing Scholarship Holders, led by their motivation to teach their Engineering students in an applied and less theoretical way. They identified that the game "El Plan, you decide" was ideal to do it, and incorporated new conditions and creating new elements for that purpose. The proposed mechanics work as follows:

- At the beginning of the game, each player must choose a card (new element) which will define the business model to develop, from these 2 options: Quantity-Cost or Quality-Differentiation. In order to get an innovative idea, the conditions are the following:
 - › Quantity-Cost: the player must have 5 equal products.
 - › Quality-Differentiation: the player must have 3 different products (just as stated in the game's instruction manual).
- 3 events are added (new elements):
 - a) Fiscal deficit: resources in district 6 are not received.
 - b) Change in the Business Model: the players must as of that moment change the business model chosen (this event is intended to happen sometime during rounds 6 and 7).
 - c) Low investment in R&D: you cannot generate innovative ideas during this turn.

CHALLENGE I

Whoever manages to create more value, represented by the amount of innovative ideas that have been generated, wins the game.



WHAT TYPE OF BUSINESS MODEL
DID THE PLAYERS PREFER?
WHY?

Draw a relationship between the different types of business models presented in the game and real examples.

OPTIONAL CHALLENGE

If you want the experience to be more meaningful, the main challenge is to demonstrate the benefits and difficulties of each business model.



CLOSING:

We suggest choosing two players at random so that they can explain to the rest of the participants the different business models, how they were able to see them in the game, and how they link them with real life.

6. MACROECONOMICS

- Intention: Learning the effect of macroeconomic events and how to anticipate them
- Game used: FinanCity
- New element: Unforeseen macroeconomic events are added

To continue with the link between the game and real life, we question how much macroeconomic events affect our day to day decisions. We live in a globalized world, which is why we are ever more frequently exposed to situations experienced in other countries that affect us both directly and indirectly.

To carry out this variant, 10 events are placed on 10 different cards. Each card has the name of the event on one side, and the effect of that event on the other side. The cards are placed with their titles showing and in order of appearance, but the effect is unknown (upside down). The macroeconomic events are independent of the game's normal events; however, the latter must be repurposed so that they are related to the macroeconomic event, just to ensure consistency and that there are no misunderstandings.

UNFORESEEN MACROECONOMIC EVENTS		UNFORESEEN
FRONT	BACK	
Inflation	Education and shopping cards are worth double	A cousin visits us
Interest rates raise	The loans received in this turn are paid off with 7 repayment tokens	Bonus at work
The dollar is on the move	Dollar rises: Fixed household expenses increase by 10% and for exporters income also increases by 10%	The refrigerator is damaged
Access to education improves	Education cards are half price	Scholarships
Banking assets freeze	Cannot save or take out savings until up to and including turn 9. Existing savings do not bear interest	Field day
Unemployment	This turn pays out half the normal income	Buying medicine
Exchange rates fall	Loans received in this turn are paid off with 1 less repayment token than usual	Prices lower
War	All players lose 50% of their wealth	Pollution increases
Fall in petroleum prices	Fixed household expenses are reduced by 20%	Fuel prices fall
Luxury tax	Everyone must pay 100% of the value of their shopping cards (excluding NGO Donation)	Savings reward

The idea is to help players understand what each macroeconomic event means and what its effects are in order to be able to foresee consequences and to make decisions accordingly.

Before playing, you can see how much the players know about the economic events. But only show players the name, not the description. Do not give them the answer either, the idea is that they feel curious about what they do not know first. This way you generate more challenges for them (taking care, of course, to not cause them to feel anxious).



CLOSING:

What did you learn in today's session? Were you able to foresee the macroeconomic events? Which ones did you know? Which ones have you seen in the country lately?

If you want help with the definitions and descriptions of abilities and emotions, you can go to the glossary in the back of the book.

TAKE A *few minutes*



CHALLENGE YOURSELF, TEST, AND REHEARSE

AND IF WE WANTED TO ENCOURAGE
SMALL-SCALE PRODUCERS TO CREATE COOPERATIVES
THAT CAN COMPETE AGAINST LARGE ORGANIZATIONS,
MONOPOLIES OR OLIGOPOLIES,

what could we do?

That was the challenge taken up by Luis Quintanilla (Mexico), Mauricio Ojeda (Chile) and Diego Lopez (Ecuador), all 2016 Learning by Playing Scholarship Holders, with the game "El Plan, the adventure of enterprise".

They proposed the following modifications and conditions:

- One player starts as a monopoly, starting with double resources. This person can buy investments and/or products from the other players at normal cost, and no player may oppose them.
- Away from the board a cooperative is placed (new element). In the first instance, the objective is that non-monopoly players give the cooperative one investment card of each type and two resources of each type. When they have all done so, the cooperative is considered active.
- The card "recession" must be taken out of the events deck, as it would make players donate to the cooperative just to avoid losing resources, and that is not the objective of this dynamic.
- Once the cooperative is active, the monopoly player becomes a normal player. All other players (except the former monopoly) can buy investments and products with a discount of 1 for the rest of the game. Whoever has more innovative ideas wins. If the cooperative cannot be formed, the monopoly wins, which encourages the monopoly to play aggressively.

Below are some case studies and examples developed by consultants, teachers, and/or other organizations from different countries, who have developed Learning by Playing initiatives over the years. They exploited the wide range of possibilities available to create custom-made experiences for a number of different target segments and purposes.

COUNTRY: Chile

ANO: 2011 - to date

MANAGER: Universidad de Antofagasta (UA)

TARGET SEGMENT: Young people aged 15 - 17

TOPIC: Entrepreneurship Tournament (entrepreneurship education)

GAME USED: El Plan: the adventure of enterprise

WEB: <http://torneoelplan.cl/project/torneo-el-plan-antofagasta-2014-u-de-antofagasta/>

COUNTRY: El Salvador, Honduras, Guatemala

YEAR: 2013 - to date

MANAGER: Juan Duch (GIZ Centroamérica)

TARGET SEGMENT: Children and young people in areas of high levels of violence (PREVENIR Program)

TOPIC: Abilities for the employability of young people (Prevention of Juvenile Violence in Central America)

GAME USED: El Plan: the adventure of enterprise

WEB: www.gizprevenir.com

COUNTRY: El Salvador

YEAR: 2014 (they have continued using the methodology in different groups and contexts)

MANAGER: Felipe Torres and Edwin Berrios (IT Consulting)

TARGET SEGMENT: Young people of higher education (FUSADES Experience)

TOPIC: Entrepreneurship Tournament (entrepreneurship education)

GAME USED: El Plan: the adventure of enterprise

WEB & VIDEO: <http://torneoelplan.cl/project/torneo-el-plan-experiencia-fusades-el-salvador-2014/>

COUNTRY: Spain

YEAR: 2015

MANAGER: Victoria Gómez and Ismael Abel (Alias Group).

TARGET SEGMENT: Children of 10 to 12 years (Centro Misericordia de Valencia)

TOPIC: Financial literacy in schools

GAME USED: FinanCity: organize your money

VIDEO: <https://www.youtube.com/watch?v=XSEpJwxJ-GI>

COUNTRY: Uruguay

YEAR: 2016

MANAGER: Mariana Morales (Coordinator Espacio Emprendedor for OPP project)

TARGET SEGMENT: Young people of 15 to 17 years (Department of Colonia)

TOPIC: Entrepreneurship Tournament (entrepreneurship education)

GAME USED: El Plan: the adventure of enterprise

WEB & VIDEO: <http://torneoelplan.cl/project/torneo-el-plan-la-aventura-de-emprender-colonia-uruguay-2016/>

COUNTRY: Dominican Republic

YEAR: 2016

MANAGER: Rosario Aróstegui (Centro Gerencial Meta)

TARGET SEGMENT: Parents and adolescent children (Comunidad Educativa Conexus)

TOPIC: Let us speak with our family of personal finances

GAME USED: FinanCity: organize your money

VIDEO: https://www.youtube.com/watch?v=Xppy8l6d_0Y&t=167s

COUNTRY: Chile

YEAR: 2016

MANAGER: Pía Wiche (School of Industrial Engineering, PUCV)

TARGET SEGMENT: 6th year Engineering students (Entrepreneurship course)

TOPIC: Development of entrepreneurship skills in undergraduate studies

GAME USED: El Plan: you decide

COUNTRY: Honduras, Guatemala, El Salvador

YEAR: 2016

MANAGER: Oneyda Lopez and Kevin Rodriguez (Hanns R. Neumann Stiftung Foundation)

TARGET SEGMENT: Children of rural areas (Coffee Plantations)

TOPIC: Encouragement of entrepreneurship

GAME USED: El Plan: the adventure of enterprise



FINALLY,

WE'D LIKE TO SHARE A SELECTION OF SERIOUS GAMES, EACH ONE DEVELOPED TO APPROACH COMPLEX TOPICS IN A SIMPLE AND FUN WAY. SOME OF THEM ARE:

• EL PLAN: THE ADVENTURE OF ENTERPRISE (2009): WWW.JUEGOELPLAN.CL

This game is designed to educate for entrepreneurship. It serves as a tool with which users can work on cross-sectional topics associated with the development of life skills and specific contents related to chains of production.

• MY EARTH (2010): WWW.ALDEBARANGAMES.CL

My Earth is a game involving the positioning of workers, wherein the players try to work their lands in the best possible way. They have to seed and harvest their land and to take care of their animals so that they can produce goods that they will later sell on the various markets available.

• EL PLAN: TÚ DECIDES (2012): WWW.JUEGOELPLANTUDECIDES.CL

This game also aims to develop entrepreneurship skills. It perfects players' technique and demonstrates the complexity of the many variables that must be handled to create high impact results: reacting promptly to change, making decisions under pressure, cooperating to compete, and choosing the right financing options.

• FINANCITY: ORGANIZE YOUR MONEY (2013): WWW.JUEGOFINANCITY.CL

This is a financial literacy game that simulates the process of managing domestic resources with all the variables that come with it: planning income and expenses, deciding when and how to invest, handling unforeseen expenses, and balancing money with the family's well-being.

• TERRANOVUP (2015): WWW.TERRANOVUP.CL

A serious game for learning to manage finances and develop innovative ideas for the business world.

• IMPACTA (2015): [HTTP://INCIDE.CO/IMPACTA/](http://INCIDE.CO/IMPACTA/)

A board game that combines strategy and roleplay with debate, dialogue, and negotiation to generate skills related to constructive and collaborative problem solving and conflict resolution.

• FARMERS (2016): WWW.JUEGOGANJEROS.CL

A game that promotes Sistema B values for a new, more sustainable, cooperative, and systemic economy.

• TOPPLING (2017): WWW.JUEGODERRIBANDO.CL

This game raises awareness of and deepens our perspectives on the toxicity of myths, which are the root of exclusion in our society.



GLOSSARY

A

ABILITY TO TAKE RISKS

The calculated interest in speculating on uncertain situations that carry risks or unknown (economic, social, and/or family) difficulties, and that grant greater potential achievements than a conventional situation. It is assumed that one will have to incorporate new knowledge and learnings if one wants to succeed. A positive attitude in the face of mistakes and failure, seeing them as improvement opportunities.

ADAPTABILITY

Quality of a person capable of adjusting well to a situation.

C

COLLABORATION

Working with one or more people in the execution of a task.

COMPETITION

The ability to compete in free market conditions on the basis of the design and development of innovative products that satisfy a demand in pursuit of social welfare.

CONFLICT OF INTEREST

Scenario where a person must make a decision regarding two or more situations, but where the decision cannot favor all of the situations. The person must choose according to their criteria.

CREATIVITY

The capacity to create, to invent new concepts or ideas, to work in non-traditional ways.

CRITICAL THINKING

To conduct an in-depth, objective analyses of as many sides of a problem or situation as possible.

D

DEVELOPMENT OF PEOPLE

The process of transformation by means of which a person adopts new ideas or ways of thinking, that allow them to generate new behaviors and attitudes that result in the improvement of their life quality.

E

EFFECTIVE COMMUNICATION

The sender manages to convey the message clearly by making the receiver understand the situation and information.

EMPATHY

The ability to put oneself in the place of another, of feeling what that person is feeling.

ENTERPRISE

A way of thinking, reasoning and acting centered on opportunities, proposed with a global vision and carried out through balanced leadership and the management of calculated risks. Its result is value creation with individual and social benefits. It requires abilities that allow a person to face up to failure and the difficulties that it entails.

ENVY

Displeasure or sadness in a person produced by a situation, good or ability that another person has.

ETHICS

The ability to act in line with the moral principles, values and good professional practices, taking up a clear position in central subjects such as the right to life, individual freedom, sense of transcendence, tolerance and respect for other points of view, making sure that one's actions and intentions contribute to the positive development of oneself and the surroundings.

F

FLEXIBILITY

The ability to quickly and effectively adapt behavior, thoughts or plans to different changes, difficulties, situations, contexts and people, in order to achieve the objectives set.

FRUSTRATION

The feeling of disappointment and sadness by a goal not reached.

FRUSTRATION TOLERANCE

Persisting in pursuing a goal despite the difficulties that arise and the feelings of disappointment they carry.

I

IDENTIFICATION OF NEW OPPORTUNITIES

The capacity of "a sense of alertness" or "intuition" that helps identify or create opportunities in the environment through an exercise of analysis of information, needs and available resources, identifying causes and projecting consequences, with a vision of the future.

INDIVIDUALISM

The attitude of a person who makes decisions considering their own well-being and will, without considering that of other individuals.

INITIATIVE

The disposition to act in a proactive and independent way, ahead of others, making proposals and establishing solutions that generate changes in oneself and/or in the surroundings.

INNOVATION

The process by which knowledge and ideas are transformed into new products, services, or ways to do things that add value and that arrive in the market having a demand to satisfy.

INTEREST

A particular preference towards a situation, object, or person, among others.

INTRAPRENEURS

Entrepreneurs who are in a corporate sphere, for example in charge of creating entirely new business units that aim to attract new types of clients.

J

JOY

A pleasing and vibrant feeling that usually manifests externally.

K

KNOWLEDGE

A set of information on a specific topic, obtained through experience or introspection.

L

LEADERSHIP

An individual's skill that allows them to influence their own membership group or a specific audience before which they express themselves and direct their message.

LISTLESSNESS

Not having the enthusiasm, willingness or desire to do something.

M

MOTIVATION

Defined as the emphasis discovered in a person towards a determined means of satisfying a need.

MOTIVATION TO SUCCEED

The interest and constant passion to satisfy one's own personal motivations successfully, working hard to do things in the best possible way in terms of efficiency or results, and reaching challenging goals that exceed normal standards.

N

NEED

What a consumer wants to satisfy when acquiring a product or service.

O

OPTIMISM

The high expectation that things will go well in general, despite setbacks and frustrations.

P

PERSEVERANCE AND DISCIPLINE

The willingness to remain on course, constant and systematic in the execution of actions to achieve a task, looking for resources and successfully overcoming situations of failure and frustration, keeping an adequate emotional balance and stable motivation until reaching expected results.

PLANNING AND ORGANIZATION

The ability to carry out an idea or project, being aware of previous or similar experiences, effectively determining the objectives, goals, timelines, required resources and associated risks, including mechanisms for monitoring and verification of results.

PLASTICITY

The quality of being malleable or flexible, which implies the ability to modify a determined original form to adapt to different ends.

POSITIVE SELF-PERCEPTION

The strong conviction that one is able to carry out a task or of choosing the most suitable approach to solve a problem, making use of their freedom to question, criticize, and put forward their own viewpoints. People with this quality can confront new situations with confidence and reliability in their own abilities, decisions or points of view.

R

RESILIENCE

Ability of a person or a group of people that will allow them to recover from a stressful or traumatic situation.

RESOLUTION OF PROBLEMS

Ability to identify a problem and give a solution in a way that is more efficient than expected.

RESPONSIBILITY

Value which is in the conscience of a person, that allows them to reflect, to manage, to guide and to value the consequences of their acts, always in a moral level. It is also understood of the condition of being in charge of a set of duties or a specific result.

S

SADNESS

A feeling of melancholy, to be afflicted or heartbroken.

SELF-KNOWLEDGE

A reflective process (and its result) by which a person acquires notions of their self and of their own qualities, defects, and general characteristics.

SOLIDARITY

Supporting and empathizing with outside causes, benevolently giving others what they need.

STRENGTHS

A set of skills or strategies that to a determined individual or company generate advantages in relation to others to be able to develop a specific task well.

SUSTAINABLE DEVELOPMENT

A process that allows us to satisfy the needs of the current generation, both in the present and in the future, without jeopardizing the abilities of the future generations to satisfy their own needs.

T

TEAM

A group of human beings who meet, collaborate and work together to reach a goal in common.

TEAMWORK

The set of activities carried out by a specific group of people organized in order to be efficient and effective.

U

UNCERTAINTY

Doubt or perplexity surrounding a matter. This is a common emotion in the world of entrepreneurship and knowing how to act on it is an important skill.

V

VALUE DRIVER

Said of a person who is able, through their actions, to constantly improve their surroundings, be it an organization, a society, a neighborhood, or their family.



WEAKNESSES

Factors that cause a person to assume an unfavorable position in relation to others or in relation to the competition.

IN SUMMARY...



HOW DO WE REPURPOSE A GAME?



WHAT CAN WE CHOOSE?

LEVELS

- I LEVEL I
- II LEVEL II
- III LEVEL III

WHAT DO WE WANT TO MODIFY?

MODES

- INDIVIDUAL
- SHARED
- TEAM

VARIABLES

- TIME
- NUMBER OF TURNS
- ORDER OF THE DECKS

WHAT DO WE NEED TO INCORPORATE?

RULES

- POSITIONS
- ROLES
- VICTORY POINTS

ELEMENTS

- LOANS
- INVESTMENT CARDS
- EVENTS

WHICH GAMES WILL WE USE?

WHICH SCENARIOS WILL WE REPURPOSE?

WHO HAS ALREADY DONE IT?

FINANCITY
ORGANIZE YOUR MONEY

EL PLAN
THE ADVENTURE OF ENTERPRISE

EL PLAN
YOU DECIDE



- IDENTIFYING OPPORTUNITIES
- MAKING DECISIONS
- BUSINESS MODEL
- ACHIEVEMENT OF TEAM OBJECTIVES
- INEQUITY AND LACK OF OPPORTUNITIES
- MACROECONOMICS



TO MAKE SURE WE'RE ON THE SAME WAVELENGTH...

GLOSSARY

WHAT WOULD HAPPEN IF MORE PEOPLE APPLIED LEARNING BY PLAYING?

WHAT WOULD HAPPEN IF MORE PEOPLE APPLIED LEARNING BY PLAYING?

THE WAY IN WHICH WE INHABIT THE WORLD WOULD CHANGE!

It's that simple: the world would be a better place to live in, because people who play are more optimistic, are friendlier, are more conscious that the world is full of potential and is never dull! Above all, people who play know that sometimes you win and sometimes you learn.

Nobody is replaceable in this challenge. Rather than the toys or games themselves, it takes people wanting to play, people aged from 3 to 103, as the saying goes. This concept is for everyone and the number of topics we can address based on the Learning by Playing methodology is so broad that we would need more hours in a day to play them all.

The playful mindset allows us to create, educate, undertake and innovate. It depends on us to let it loose, with the clear warning that we are in danger of having a good time and, above all, learning.

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**KEEP THE PIECES FROM
THE PAIRS GAME HERE
(PAGES 61 A 64)**





PLAYFUL
Mindset

CARLA ARELLANO GARRIDO • KENNETH GENT FRANCH