# How to Generate a Motivative, Effective, Trusting, Innovative and Creative Work Environment That Fosters the Creation of Innovative Educational Experiences: Smart Center Ideation

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Nowadays, education institutions seek to innovate their methodologies to enhance their learning processes to be more effective. To achieve this, it is fundamental for the people who create educational experiences to build a high-performance work team. For this, working in atmospheres that foster motivation, effectiveness, creativity, innovation, and trust is vital. Project managers play a central role in setting the work environment that generates a high-performance work team. A high-performance work team is "a group of goal-focused individuals with [...] complementary skills who collaborate, innovate and produce a consistently superior result." [1]

This paper presents the project management process that SMART CENTER, a student center at Universidad Panamericana, followed to achieve an innovative, effective and highly engaging experience called SMART Room for more than 100 students in a time frame of 5 weeks and a team of only 10 people. This article will cover each step taken for the ideation, organization, planning, and execution of the SMART Room and will explain the basic principles so that anyone can replicate it in their teams and projects.

Keywords: project management, high-performance work team, innovation, work environments

#### SMART CENTER: WHAT IS IT AND WHO COLLABORATES IN THE AREA

SMART Center is an area of Universidad Panamericana that focuses on student academic development throughout their university life. It is composed of 4 main areas:

- 1. Success Center: soft skills development area.
- 2. Meeting Point: area that supports students groups that promote academic experiences.
- 3. Advisory: area that coaches and prepares academic advisors to keep track of their students.

4. Reload & Talent: area that offers a personalized program that allows the students to discover and enhance their talents.

SMART Center has ten team members, six working full-time (40 hrs per week), two of them working part-time (20 hours per week) and one of them working 10 hours per week. The main characteristics of the team are:

- 1. All of the members have a degree related to education or psychology.
- 2. It is an intergenerational team. Ages of the members vary from 26-60.
- 3. It is an all-women team
- 4. Each area is independent from one another, but they share the same physical space.
- 5. Each area has different working ways and schedule, that is influenced by its own objectives.

#### **SMART ROOM**

#### Challenge Presented to the Team: Its Characteristics and Principle Difficulties

On september 2019, the Academic Head Department of Universidad Panamericana (UP), asked SMART Center to work as a whole to create an experience for students framed on the Innovation Week at UP. This experience had the following guidelines:

- 1. The experience should be creative and innovative.
- 2. The experience should be related to Smart Center goal (academic development).
- 3. The experience should be open to all university students.
- 4. The time-frame to ideate and implement the experience was 5 weeks.

This guidelines both carried benefits and challenges to the area. Since they were very broad, they gave the team a lot of liberty and room to create and ideate. On the other hand, it also represented a challenge as the members didn't know what was expected. It served as an opportunity for the members to work with each other which was viewed by all as a benefit, but also entailed the natural challenges of communication and not knowing each other working ways. Moreover, the team structure also brought some challenges of its own:

- 1. Most members of the area didn't have experience in the creation of innovative programs or their daily workload didn't involve any innovative or creative processes.
- 2. Ideas of what was the best for the students differed from person to person because of intergenerational differences.
- 3. Some members of the team had difficulties with the use of new apps and with adaptation to new technologies.

The time framed gave by the Head Department represented the most difficult challenge and benefit of it all, since it induced pressure and created the necessity of working in a fast-paced way. This generated the necessity of creating a highly organized and demanding working structure.

#### **How SMART Center Faced the Challenges: Experience**

Each step of the experience will be explained and will be followed by a table with the general principles and benefits in order for them to be replicated.

#### *Integrating the Team: Brainstorming*

The challenge was presented directly from the Vice Chancellor for Innovation in Education of Universidad Panamericana to SMART Center director. In order to generate teamwork from the beginning she decided to present the idea to all the members of the team. The idea was first exposed in a mail, asking the members to generate different alternatives of experiences to solve the challenge. All the members presented the alternatives on a brainstorming format meeting. At the end of it, the team decided to create an escape room called Smart Room. One of the members had previously created an escape room for one of the areas of SMART Center. Considering this previous experience, the team decided that this person would lead the project.

# TABLE 1 PRINCIPLES & BENEFITS 1

PRINCIPLE	BENEFIT
Involve the team from the beginning [2]	Members of the team feel integrated from the beginning, allowing them to feel part of the challenge, which generates engagement form their part in the working process.
Time to elaborate proposals before the meeting	This makes more efficient the meeting and permits more ideas to be pitched.
Brainstorming	This format propitiates a creative setting and allows member to work as a team and decide which idea is the best in a consensual way.
Consensual decision [3]	The decision should be made considering all the team members. This permits members to feel heard and taken into account. At the end of the meeting members should feel the idea belongs to the team and not only to one member.
Defining the leader of the project in an explicit way [3]	In any project a leader should be defined in an explicit form. This gives structure and stability to the team.
Allowing new leaders to emerge [2]	The leader of the project should not necessarily be the director, it can be somebody else depending on the experience, the skills needed and the profile of each member.
	If the leader of the project is different from the director, it is important to establish an explicit alliance between them. This will guarantee the accomplishment of the activities and avoid possible frictions between coworkers.

Defining Roles and Tasks: First Steps

After the meeting, the director and the project management leader got together to establish the next steps to accomplish the goal. The roles and activities for each member were decided in that meeting, as well as the general timeline guide. As the members of the team had no experience generating an escape room, a web page was emailed to each participant in order for them to deepen on the information. An escape room is a game in which a team of players cooperatively discover clues, solve puzzles, and accomplish tasks in one or more rooms in order to progress and accomplish a specific goal in a limited amount of time [4]. To create the clues each member was assigned a specific activity and was asked to develop a prototype of it.

# TABLE 2 PRINCIPLES & BENEFITS 2

PRINCIPLE	BENEFIT
The roles and activities of each member should be defined in an explicit way and should be time framed.[3]	This gives order, structure and clarity to each member and allows the leader to stay at top of the schedule and to track each person advancement.
Transparency	Decisions made in any meeting should be inform to all members in order for them to feel part of the project and for them to know in which step of the process the project is situated.
Open channels of communication [3]	This gives clarity to both the leader and the team members it also permits suggestions and improvements to be made in the process.

### Mapping SMART Room Experience

A second meeting with all the team was convened. To have an efficient meeting, the project management leader and the director previously planned the structure of it. The meeting was time framed and had two clear objectives:

- 1. To present all the prototypes made by the team members in order to obtain the following information:
  - a. User instructions
  - b. Materials needed for the prototype
  - c. Difficulty level
  - d. Time to solve the activity
- 2. To design the student experience step by step in a visual map.

Formats were made to recollect the necessary information to create the working plan for the next weeks.

# TABLE 3 PRINCIPLES & BENEFITS 3

PRINCIPLE	BENEFIT
Define meeting main leader [3]	It gives clarity and order in the meeting, because the leader controls time, and defines who talks and when.
Define meeting objectives [3]	This guides the work process, facilitates the decision making and make time and actions more efficient.
Define time for each meeting activity [3]	When actions are time framed team members have clarity of what they have to do and when. Also, time constrictions allows information to be concrete.
Communicate objectives in an explicit way [3]	Team members should know what is expected from them in order to deliver it.
Return to the objective everytime needed [3]	It avoids possible setbacks and allows the actions to be goal oriented.
Establish formats that guide the meeting	It facilities the roles and tasks to be defined and leads the actions to be goal oriented. It also gives clarity to each member of the team of what should they do and what information is needed to obtain the meeting goal.
Open attitude toward team members [2]	To be receptive to both positive and negative feelings and actions of the team members during the meeting and acting towards them will make them feel motivated.

### Making SMART Room a Reality

After the second meeting the project management leader took into account the profile of each member of the team to define a working model to construct the Smart Room. This working model was divided in an excel grid that defined the general logistics before, during and after the event:

- 1. Activity
- 2. Steps needed to complete the activity
- 3. Moment when the activity will be needed
- 4. Tasks to complete the activity
- 5. Link to complete the activity document
- 6. Responsable
- 7. Due date

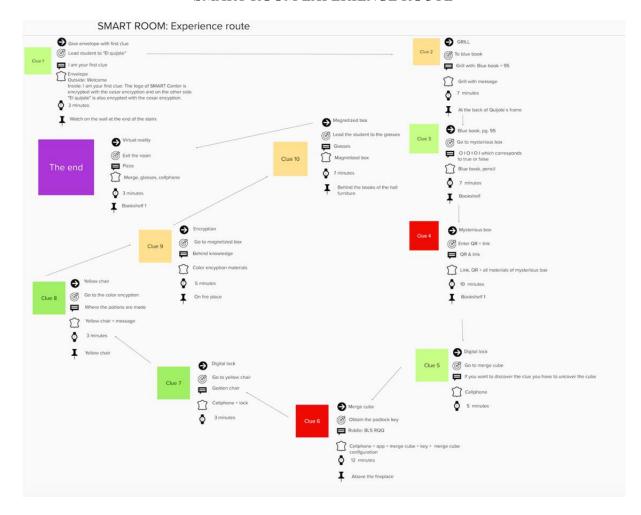
# FIGURE 1 GENERAL LOGISTIC EXAMPLE

ACTIVITY	STEPS	MOMENT	TASKS	RESPONSABLE	DUE DATE	LINK
Comunication with students	What can the student expect?	Social media	Answer the document: expectations			Link to drive
	Event speech	Launching day	Create script	Leslie	October 22, 2019	documents
	Maling templates	Before event	Answer mailing template			
Enrollment	Registration web		Set of plataform	Fernanda	October 23, 2019	Link to drive
	Excel tracking  Cancelation tracking	Student tracking before and during event	Fill excel Print excel lists	,	0110111 123, 1013	documents
	Attendace list					



Furthermore, the visual route of the student experience was mapped in a platform called Mural, which helps create visual workspaces for visual collaboration.

## FIGURE 2 SMART ROOM EXPERIENCE ROUTE



A third meeting was convened. In this meeting each step of the grid was presented to each team member and the due dates were established in that moment. The general working mode was explained in order for the members to know what was expected for them.

# TABLE 4 PRINCIPLES & BENEFITS 4

PRINCIPLE	BENEFIT
Explain each division of the grid and how it functions	The project management grid should be explained step by step to all members of the team. This gives clarity and permits members to know the tasks expected for each of them.
Activity division	Divide each activity in as many tasks possible to make it easier to complete and achieve by team members.
Use an online collaborative platform	This allows better communications, has automatic saving, facilitates the activity tracking, record of changes and who did it is registered, and if something is deleted by accident it can be recovered.
Adequate materials	When using online platforms, it is necessary to take into account if the members of the team know how to use them. In order for them to have an easy change adaptation the project manager should have both online and printed versions of the format. The final objective is for all the members of the team to use the main channel of organization chosen.

### SMART ROOM: Hands on

After the third meeting, SMART Center team started to work in their assigned tasks. From this third meeting no other meeting was necessary. The tracking was made online in Google Drive and doubts were answered on the same documents the team was working on. First obstacles came across:

# TABLE 5 OBSTACLES & RECOMMENDATIONS

Obstacle	Recommended solution
Communication: Members of the team started to work on their tasks using the correspondent documents. When they finished, they didn't make any notification to the project manager leader. This complicated the tracking of the activities, and generated confusion.	Remind the team the rules and processes when they are not being followed. This reminder can be done in a written or oral way.
Some of the areas had internal communication problems between them which affected the completion of certain activities that were required. This internal communication problems were not discussed with the project manager leader, and only arose when due dates were already expired.	2. Two days before the due date, write an email to all team members remembering them the due date of their tasks and asking them if they have any doubts or problems to accomplish their activities.
Not all the members asked their questions when they had them, and this generated delays on the due dates.	
Time pressure: Team members felt very pressured by the constricted time they had to complete their tasks. This led to high levels of stress, that at the end had a negative impact on the completion of activities.	<ol> <li>Help the team reorganize their daily activities to establish new priorities in their workload.</li> <li>Empathize with the team members recognizing it is a big effort that is taking more time than their usual workload. Let them see it is something temporary that will have some compensation at the end. (ex. days off, schedule flexibility, monetary compensations).</li> </ol>
Lack of skills to assemble the materials: Some of the clues that needed to be constructed required engineering skills to make electrical circuits or laser cuts. This made some of the members feel stressed and incompetent which generated a delay in the due date and a negative feeling on the team.	1. Be open and flexible. If some members of the team can't do something offer options of solution. (Ex: hire someone with the skills needed, pay them a course, tell them to make alliances with experts).

#### SMART ROOM: Pilot Test

One week before Smart Room launching, the experience was proven with students of the university. This pilot test seeked to:

- 1. Verify the completion time and the difficulty level of the experience.
- 2. Verify if the proptypes function and if the materials were resistant enough.
- 3. Verify if the experience route made sense and was followed in its ideal way.
- 4. Define how many staff was needed to make Smart Room a reality on the launching day.
- 5. Detect all the possible flaws.

# TABLE 6 PRINCIPLES & BENEFITS 5

PRINCIPLE	BENEFIT
Pilot test: Transparency with the user	All of the people that participate on the pilot should know they are participating in one, in order for them to give objective feedback.
Feedback Survey	Before the pilot a feedback format should be planned to obtain the necessary information to make the experience better.
Be open to criticism	It is important to prepare the team for negative comments on their work. Pilot tests users are supposed to detect all the possible flaws in order to make the experience better.
Open communication with team members	It is important to empathize with the team, explain them what they should be doing at the pilot and what they can expect from it. It is also important to tell them that changes will be made on their work after the pilot experience, and to prepare them to work rapidly on those changes.
Make modifications	All details detected by the pilot test users should be taken into account in order to properly prepare the experience to students needs and recommendations.

### **RESULTS**

After the pilot test team members got together to define the necessary changes to improve the experience. They had a week to complete them. While the team worked on the changes, the project manager defined what needed to be done by all the staff members in each moment of the launching day and prepared a visual route for anyone to follow on that day.

### FIGURE 3 VISUAL ROUTE FOR STAFF



On the route each team member is assigned to one task in a specific hour frame.

### TABLE 7 PRINCIPLES & BENEFITS 6

PRINCIPLE	BENEFIT
Proactiveness - Motivation [2]	It is important to talk with the team about having a good attitude on the launching day and motivate them to help in any inconvenience or situation that was not planned. This will ensure a solution-focus atmosphere.
	The director should motivate the team with a pitch at the beginning of the day. It is important to recognize the efforts made during the process and to make them see the impact of their work completed in the Smart Room.
Know everything about the experience	Every member of the team should know every detail of how the experience work. They should all be able to solve questions during the experience and guide any user to live it properly.
Keep track of everyone functions	Everyone should know was is expected from each team member. This will facilitate the communication between them and the solution to possible problems.
Channel of communication [3]	For the launching day, it is important to establish in an explicit way the communication channel that will be used. It needs to be efficient, immediate and to connect all team members. That is why a whatsapp group was created for the occasion.
Closure	Make an official statement at the end of the day recognizing the job made during the last months thanking the team members for their special efforts.

#### **CONCLUSIONS**

During the launch of Smart Room, 100 students attended. The structure followed during the whole process and the visual aids prepared for the launching day, permitted the team to have everything under control and to feel confident on what they should be doing and how.

The overall experience was successful and led to the integration of the team. It had a direct impact on their attitude. Since that day team members are more willing to assume and participate in new creative and innovative projects, losing their initial constraints.

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