Practical example on how to plan and develop a participatory group dynamic through an online platform, in the pursuit of Sustainable Development Goal number 4 "Quality Education"

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Abstract

In the current conditions of university teaching, derived from the COVID-19 pandemic, one of the most complicated activities to develop are group dynamics. Taking advantage of the teaching content of the university subject "Organizational Behavior and Change Management", a plan has been designed and executed to ensure that students are actively involved and participate in a practical session set out precisely as group dynamic. It is specifically the game of the atomic bunker.

This activity is linked to the implementation of initiatives aimed at achieving Sustainable Development Goal (SDG) number 4, defined as "Quality Education", which is based on the firm conviction that education is one of the engines more powerful and proven to ensure sustainable development.

The conclusions show that, despite the fact that the a priori difficulties were great, with a prior planning of communicative actions (sharing information about the principles and objectives of the session) towards the students, asking the students themselves for advice on possible energizing actions of the session, and with sufficient motivation (based on the self-conviction of the students that they themselves have participated in the design of the activity), the activity has been developed successfully and achieving results comparable to those of other courses in which it had been developed in a face-to-face format.

Keywords: Organizational behavior; Change management; Group dynamic; Online teaching; Sustainable Development Goals; Quality education.

Introduction

This study aims to design and empirically test an action plan so that the practical activity on "The Underground Shelter", applied in the teaching of the subject "Organizational Behavior

and Change Management" is developed in an online teaching environment through of a technological platform for videoconferencing meetings. This activity is circumscribed in the initiative to promote the Sustainable Development Goals (SDG). The initial and basic objective of the practical class has traditionally been to determine how stereotypes influence decision-making, but in this case the need to adapt the format to a non-face-to-face environment has been taken into account and therefore to the need to use all kinds of accelerators and facilitators so that the involvement and active participation of the students is at least comparable to what has traditionally been obtained in face-to-face environments.

1.1.- Sustainable Development Goals (SDG)

In line with the global trend to seek initiatives that make all types of activity sustainable, respectful, and environmentally friendly, this study is directly related to the Sustainable Development Goals (SDG). The United Nations (UN) is promoting, in line with the trend of achieving a better life for planet Earth and for future generations that inhabit it, an initiative called Sustainable Development Goals (SDG) focusing on "17 Goals to Transform Our World" (UN, 2020c). The Sustainable Development Goals are basically a call for action by all agents from all countries to promote prosperity while protecting the planet. It is recognized that ending poverty must go hand-in-hand with strategies that build economic growth and address a range of social needs including education, health, social protection, and job opportunities, while tackling climate change and environmental protection. More important than ever, the goals provide a critical framework for COVID-19 recovery (WHO, 2020).

Among these SDGs (UN, 2020a), this work is circumscribed within the scope of "Goal 4 "Quality Education" (UN, 2020b). What is intended with this objective is that the education offered at all educational levels is of quality, inclusive, and conducive to the sustainable development of society. Precisely with the activity proposed in this study, it is intended to verify which are the accelerators that can allow group dynamics to be carried out in the online format, with which this type of training activity could reach wide spectra of the population to which the difficulties of presence can deprive them of it.

1.2.- "Organizational Behavior and Management of Change" University subject

This activity has been developed and performed within the planning of the " Organizational Behavior and Change Management " University Subject, located in the 3rd year of the Degree in Informatics Engineering in Escuela Politècnica Superior de Alcoi (EPSA).

The study of Organizational Behavior (OB) concerns the study of behavior and psychological processes in contexts usually related to work. Individual, group and organizational variables are part of the global scenario that may lead to improve performance (Robbins et al., 2013).

What people do in an organization in order to facilitate the understanding of the complexity of the interpersonal relationships and people interactions, is the base to construct hypothesis about how that behavior affects the performance of the organization. It covers the following variables:

Individual	• perception
	• learning and change of attitudes
	• motivation and satisfaction
	• design and stress at work
Group	• group work
	• group communication
	• leadership and conflict
Organizational	• politics
	• climate and culture
	• organizational change

The teaching guide of the subject includes the following competencies that should be gathered by the students at the end of the course:

1. Ability to understand and apply the principles of risk assessment and apply them correctly in the preparation and execution of action plans.
2. Ability to integrate Information Technology and Communications solutions and business processes to meet the information needs of organizations, allowing them to achieve their objectives effectively and efficiently, thus giving them competitive advantages.
3. Ability to understand and apply the principles and practices of organizations, so that they can act as a link between the technical and management communities of an organization and actively participate in the training of users.
4. Locate relevant information from different sources and investigate technological developments in their field of work and related areas.
5. Reason in an abstract, analytical and critical way, knowing how to elaborate and defend arguments in their area of study and professional field.
6. Know how to apply their knowledge to their work or vocation in a professional way and possess the skills that are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within their area of study.

The fact that this subject focuses on the development of the capacities of students around the management of personal assets, and the acceptance of diversity and the challenges of interpersonal relationships at work, greatly facilitates the use of this academic environment to plan and check how people can overcome the difficulties of relating in virtual non-contact environments. This is the reason why this subject and its students have been selected for the study.

1.3.- Bunker and atomic disaster practice

The practice of atomic disaster tries to test what is the influence of stereotypes in people's decision-making. It is, therefore, one of the practical cases in which the personal, group, and social character of the criteria for the management of interpersonal relationships can best be evaluated. This activity fits perfectly within the learning methodology known as Project Based Learning (PBL). PBL is a modern successful way to make students be key part of their own learning (Boud and Feletti, 2013; Araújo et al., 2014; Ponsa et al., 2009).

The exercise consists in assuming that, due to an atomic disaster, a group of survival persons remains (with different and marked stereotypes), and among them they have to decide which five persons will enter the bunker and be saved, being the beginning of a future existence on Earth. In this practice, students are put in a position to make decisions under stressful conditions, with a view to the survival of the spice. The global subject learning project is therefore progressing in a practical way towards covering the third and maximum dimension of Organizational Behavior, which is the social one.

The main learning traditionally pursued in this practice is to evaluate the influence of stereotypes in decision-making involving interpersonal relationships. In addition, and in order to learn how to extend this modus operandi to the virtual non-presential environment, the necessary accelerators have been included to make the activity more dynamic and prevent the difficulty of being absent from attending the session.

Methodology

The methodology followed in this study is made up of both the dynamics of the bunker game itself, and the accelerators introduced so that it works properly in the remote format.

2.1.- Bunker practice normal development.

The main objective of this practical exercise is to simulate and evaluate how personal circumstances affect group decision-making. More specifically, this practice aims to evaluate how certain conditions (specifically related to stereotypes) influence such decision making:

- ❖ gender perspective
- ❖ age
- ❖ sexual orientation
- ❖ personality and psychological background

The work scenario is as follows: there has been a nuclear disaster and in the only atomic bunker that is open only five places remain. At the door, wanting to enter, are the ten people

listed below. It is about each student adopting a role corresponding to one of these ten characters, and after a dramatized debate between them, they must choose (by consensus if possible) in order of preference, the five that will be saved.

The list of participants (the ten characters wanting to enter the underground bunker) that is proposed to the students is:

- ❖ A somewhat neurotic widowed biologist (woman).
- ❖ A professor of History and Philosophy, with 70 years (man).
- ❖ A 30-year-old doctor (woman).
- ❖ The doctor's husband who just got out of the asylum. The two want to be together, inside or outside the shelter.
- ❖ A missionary novice (woman).
- ❖ A 35-year-old prostitute (woman).
- ❖ A murderer of 25 years (man).
- ❖ A 33-year-old astronomer who wants to come in with his rifle (man).
- ❖ A 40-year-old lesbian painter (woman).
- ❖ A 12-year-old boy with Down syndrome

The students are aimed to introduce and add some other characters, trying always to make emphasis on the specific personal features that make them different and relevant for the specie survival.

2.2.- Game dynamics and accelerators in non-face-to-face environment.

The plan is to try to carry out a practice of the type of participatory group dynamics, in the environment of the online teaching format due to the need for social distancing due to the COVID-19 pandemic. It is specifically the practice of the atomic bunker.

In order to simulate an environment comparable to the face-to-face environment, where all the participants in the game see each other's faces and have a greater incentive to participate in the theatrical dynamics, in the online format, all kinds of accelerators that favor participation must be used. active.

Trying to activate the interest of the students, the following global and comprehensive plan for the development of actions favoring the realization of group dynamics through an online platform of videoconferences and remote meetings is proposed:

1) Information to participants, in order that participants come to the session aware and determined to participate actively:
   a) The objective that is intended with the realization of the game: to empirically verify the influence of stereotypes in decision-making under stress. In this case, after a nuclear disaster, a few people remain alive, with very special characteristics, and

they must decide between them who enters a bunker with limited capacity, and who stays outside.

b) The rules of the game: each participant must assume a role from among those available, or propose an additional highly stereotyped one, and act as such during the dramatized discussion.

c) The factors that can make the game fail or succeed: fear of ridicule, lack of interest, fear of difference, shame, lack of alignment with the objectives of the game (not understanding them or not seeing the causal relationship between the dynamics of the game and the intended objectives.

2) Prior selection of roles and preparation of the dynamics, encouraging the participants to get involved in the choice of roles, and thereby trying to increase their interest in actively participating:

a) The director of the dynamics (the teacher in this case) makes available to the students a list of the available characters, and each participant (the students in this case) chooses one of them.

b) Each student prepares their arguments, depending on the character chosen and their personal criteria (survival, common good, etc.), as well as their strategy to defend their entrance (or non-entrance) to the bunker, and therefore on their survival and on the of the other characters.

3) The dynamics director prepares the dynamics accelerators, to increase motivation and active participation:

a) Offer 2 participants to act as facilitators, promoting the active participation of the rest of the members.

b) It offers 2 participants who are the vigilant soldiers of the bunker, who have a voice and vote in the discussion.

c) Categorize the result (and the mark of the practical session) according to the development of the session itself, according to:

   i) Active participation

   ii) Results obtained (not so much for the roles selected to enter the bunker as for the conclusions obtained)

4) After the session, the participants share and discuss their conclusions.

With this planning and accelerators, the aim is to obtain the same results that would have been obtained in a face-to-face format.

2.3.- Goal to obtain.

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- What is the value that the participants have assigned to each of the more representative parameters (sex, age, profession, sexual orientation, and psychological component) in this decision making.
- What is the reason for having made those decisions.
- How the fact that it was done in a non-presential format has influenced the dynamics
- Which of the accelerators:
  - have facilitated the execution of the session,
  - which have not contributed anything,
  - and which could have helped if they had been applied

Between these three conclusions, the teacher must make students reflect on the motivation and effectiveness of these conclusions, as well as the social justice they represent, in the field of the SDGs.

Results

After carrying out the practice, an ordered list of characters who should enter the atomic bunker after the nuclear disaster has been reached as expected:

1. A 30-year-old doctor (woman).
2. The doctor's husband who just got out of the asylum. The two want to be together, inside or outside the shelter.
3. A missionary novice (woman).
4. A 35-year-old prostitute (woman).
5. A somewhat neurotic widowed biologist (woman).
6. A 12-year-old boy with Down syndrome
7. A 40-year-old lesbian painter (woman).
8. A murderer of 25 years (man).
9. A 33-year-old astronomer who wants to come in with his rifle (man).
10. A professor of History and Philosophy, with 70 years (man).

These results are slightly different from those obtained in previous sessions, but they do not denote (and this is confirmed by the participants) that this was influenced by the fact of not having been face-to-face.

In decision making, and in this order, these factors have intervened:

1. Gender
2. Profession
3. Age
4. Sexual orientation
5. Psychological background and stereotype

Regarding motivation, these results are identical to those of the last two face-to-face performances, and very similar to the previous ones, only points 3 and 4 differ.

Regarding the use of accelerators to facilitate the development of the practice, and try to overcome the difficulties of the remote format:

- 60% of the participants believe that the result has been better than expected, having achieved greater dynamism than it would have been if no accelerators had been introduced.
- 90% of participants confirm that sharing information prior to the session has helped students to participate more actively.
- 80% of the students consider that the greatest motivation to participate actively has been to have energizing students, stating that seeing their own classmates get involved has led them to be more active.
- 20% of the students would have preferred that they had been given the option of not participating and having done a job instead. They state that this is not due to the non-face-to-face format or accelerators, but rather to the nature of the practice that has been uncomfortable for them.

The result has therefore been more than satisfactory, although the general comment of the participants is that a group dynamic is always more enriching in face-to-face format.

Conclusions

As a general conclusion, it can be said, observing the results obtained, that it is necessary to interpose some accelerators in the event that a highly participatory practical session is intended to be carried out through a remote platform. If not, the participants themselves predict that not only would the results have been very poor, but that it would probably have been a waste of time and an absolute failure.

Despite the difficulties, the evaluation of the participants has been positive, since most of them have been motivated and results very close to those obtained in face-to-face sessions carried out previously have been achieved.

The most important factor as a facilitator for a group dynamic carried out in an online format has turned out to be the provision of prior, clear and concise information on the objectives and development patterns of the session.

The motivation of the participants has been obtained through the active participation of the director (teacher) and students, this positive reinforcement being much more valued than any other linked to evaluations of practice or any coercive effect.

Since the practice could not have been carried out in online format, and even though the environment could be improved and other accelerators could be assimilated, the participants mostly showed their satisfaction with the development of the practice and the results obtained and accepted this methodological proposal as the second best option. after a face-to-face format.

This study has the limitations of the group of students and the chosen subject, as well as the practical session, but at the same time it has the virtue of having developed precisely in a subject in which students learn to value the human factor, for which presence (and non-presence) are indeed determining factors.

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