

Using Scenarios for the Development of Personal Communication Competence in Project Management

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Abstract

Personal communication is one of the factors having high impact on the success of projects. This work aims studying the usefulness of the application of scenarios for development of personal communication competence. Based on literature review, and considering the professional experience of the researchers, three scenarios were developed and applied. The data collection process was carried out in two moments with 24 participants: during a 3-hour training, with observation and a questionnaire to collect the participants' perspective; after the application, through a focus group and narratives. The results suggest that, according to the participants, the scenarios enhance the development of personal communication competence, but also that it may depend on a good conceptual background support, and that learners demonstrate availability and openness to this type of approach. This exploratory study presents scenarios as an innovative approach to increase the knowledge related to the development of personal communication competence in project management.

Keywords: Scenario Based Learning; Personal Communication; Competences Development; Project Management.

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1 Introduction

Project management has grown as a cross-cutting field increasingly sought after by organizations in order to implement change (Rodriguez 2017) and achieve their strategic objectives (Crawford 2005). Many organizations use projects to achieve competitive advantage in an increasingly dynamic and complex global market (Rodriguez 2017).

There is been an increased interest in structuring organizational activities using project approaches, thus augmenting the demand for professionals with project management competences, especially behavioral competences (Crawford 2005). This phenomenon can be called the projectized organizational structure (Pant and Baroudi 2008), in which project management and related competences are understood as a new form of management that allow integrating, planning, monitoring, and improving processes.

The communication process is complex in its applicability (Taleb et al. 2017), as it can lead to communication barriers (Carvalho 2008) and to ineffectiveness (Taleb et al. 2017). Different studies point ineffective communication as one of the main critical factors of project failure (Abbasi et al. 2014; Komi-Sirviö and Tihinen 2005; Sudhakar 2016). Communication problems can lead to project delays and conflicts between project team members (Taleb et al. 2017), and also affect project schedule, budget, cost, safety, and quality (Rajkumar 2010; Zulch 2014). In other words, communication in project management is demanding, because it happens at different levels: formats of communication (written, oral, formal, informal), organizational communication (taking into account the cultural aspects of the organization), people communication (between teams, departments, external stakeholders, etc.).

Within the people-focused competences, it is possible to identify, among others, the personal communication (IPMA 2015), which is seen as being fundamental in project management (Ferreira 2016; Stawnicza 2015; Iriarte and Bayona 2020). This competence is essential to achieve success, which depends on the ability of the project manager and team members to communicate effectively and in a timely manner (Aquere et al. 2012; Čulo and Skendrović 2010).

The question that arises is how to develop personal communication competences effectively. In education and training contexts, one of the approaches for development of personal competences is

the one focused on the principles of active learning (CCEA 2007; IPMA 2015; Mendonça 2007). These principles set the base ground for a large group of approaches to competence development, which are recognized as being effective for learning purposes (Freeman et al. 2014). It is possible to identify various active learning approaches applied to development of communication competences in different areas, namely: simulation (IPMA 2015; Wood et al. 2017); virtual simulation (Sanborn et al. 2019; Buchman and Henderson 2019); games (Menchaca et al. 2014; Barr 2017; Cruz et al. 2021); role play (Hundertmark et al. 2017); challenge-based learning (CBL) (Bombaerts et al. 2021); project-based learning (Graham and Mazer 2011; Lima et al. 2017; Soares et al. 2013).

Learning through simulation and role play can be implemented in different ways with the support of scenarios. These scenarios can provide a great way to help learners to acquire contextual knowledge, as it is viewed and acquired by professionals in their workplace (Carroll 2000; Errington 2009; Errington 2011). It allows students to experience real situations, however, without some of the risks and consequences associated with real situations. In other words, it enables the development of skills with the assurance of being able to experience and fail several times (Bannister 2018).

An overview of project management literature allowed to recognize the importance of the personal communication competences for the success of projects, and consequently, the relevance of selecting or creating approaches to make the process of developing these competences more effective. As referred above, different approaches may be used for developing communication competences, but there are a lack of studies focusing on the application of scenarios for this purpose. Thus, developing a study that uses scenarios, inspired by activities and problems related to project management practice, to develop communication competence, stands out in supporting project management training and team development in professional contexts. In this sense, the research question of the study sought to understand "How can scenarios contribute to the development of the personal communication competence?"

While this research question may be explored in different directions, namely by identifying advantages and limitations or constraints of the approach, the main goal of this article is to create scenarios capable of contributing to the process of developing project management personal communication competences. It is intended to innovatively explore in this field, scenario-based learning (SBL), an approach implemented in different areas, notably in medicine. Another motivation for the utilization of SBL is because it is centred on the principles of active learning, as well as other approaches recommended by ICB4, such as simulation and games. Finally, this work will use the personal communication and respective indicators and measures presented by ICB4 as a foundation for the development of the scenarios.

2 Background

This section presents the conceptual background needed for the development of scenarios that will allow to develop project management personal communication competence.

2.1 Personal Communication Competence in Project Management

Competence may be understood as "the set of information and experience that an individual possesses" (IPMA, 2015a, p. 11). The set of information and experience may be seen as the resources an individual may mobilize to solve situation-problems in different professional contexts (Zarifian

2001; Stoof et al. 2002). These resources may encompass knowledge, abilities, previous experiences, and principles one use to achieve the desired outcomes (Le Boterf 1997). Thus, developing competences is an individual and subjective process, which depends on the resources get by each person and the context in which they are put into practice.

As refereed in the introduction, the development of competences may be achieved by a panoply of approaches, namely communities of practice, coaching and mentoring, training, peer support, case studies, group exercises, simulation and gaming (IPMA 2015). Moreover, Jeuring (2016) argues that communication competences are acquired and developed through practice, which reinforce the idea that personal experience has great influence when you want to develop a competence, and this is clear in some of the previously referred approaches. In this sense, a collaborator with a larger experience may contribute to the development of case studies or in mentoring or coaching with not so experienced colleagues.

The ICB4 people competences allow to participate in, or lead a project successfully and include competences such as introspection and personal management, personal integrity and reliability, personal communication, relationships and commitment, leadership, teamwork, conflict and crisis, ingenuity, negotiation, and results orientation (IPMA 2015). In the organizational context of project management, communication is an essential competence that, when properly developed, connects all members of a project team to a common set of strategies, goals, and actions (PMI 2013).

Personal communication includes the exchange of correct, accurate and consistently presented information to all stakeholders and aims to enable the individual to communicate effectively in different situations, to different audiences and through different cultures (IPMA 2015).

In order to communicate effectively, the project manager must have a good understanding of the communication process (Rajkumar 2010). The act of sending and receiving information occurs consciously or unconsciously with words, facial expressions, gestures and other actions (PMI 2013). The communication process involves the existence of a source and a receiver, and the source is responsible for coding the information to be sent (Rajkumar 2010). The receiver receives the message and decodes it by interpreting the information contained in it. The communication process is usually inserted in a scenario or context that influences the result. This context often involves time, structure, or space (Rajkumar 2010).

Communication allows to develop the necessary relationships for successful project results (PMI 2017), integrating cost, scope and time to achieve a quality and functional product (Zulch 2014). So unsurprisingly the project manager invests most of his/her time communicating with team members and other project stakeholders, both internal and external (PMI 2017). Some authors argue that approximately 90% of the project manager's time is spent communicating (Čulo and Skendrović 2010; Rajkumar 2010; Rodriguez 2017). Thus, the success of the project depends on the effectiveness of the communication between the manager, the team and stakeholders (Carvalho 2008; Rajkumar 2010).

In summary, project communication determines and influences the project manager's relationship with project team members and how they work to achieve project goals (Rodriguez 2017). It allows the project manager to develop interpersonal relationships, inspire team members, deal with conflicts, negotiate with stakeholders, lead meetings, and make presentations (Barron and Burke 2014).

Regarding agile project management approaches, which has been in a growing trend for several years (Säisä, Tiura, and Matikainen 2019), it was not possible to find studies relating to the competences required in such contexts. Notably, the best known approach to agile project management is Scrum (Sutherland and Sutherland 2014), where activities are planned based on customer frequent feedback, time fixed cycles and strong team collaboration. In such an environment, personal communication has a high level of importance for project management. Thus, despite the fact that this work does not address specifically the needs related to agile project management, the authors believe that developing personal communication competence as defined by the ICB4 framework will also contribute to agile environments. Nevertheless, it seems that there is a gap here and, thus, a research opportunity in the field, for studying the competences needed for agile project management.

2.2 Personal Communication Knowledge, Skills and Abilities

ICB4 presents the knowledge necessary for personal communication competence, such as the differentiation between the concept of information and message, knowledge about different methods of communication and questioning techniques, knowledge about return rules, presentation techniques, characteristics of body language, communication techniques and communication styles and channels, and knowledge about concepts of facilitation and rhetoric. "Skills are the specific techniques that an individual knows and that allow him/her to perform a task", while "ability is the effective use of knowledge and skills in a given context" (IPMA 2015). Moreover, the ICB4 presents for each competence a set of indicators, and a set of measures for each indicator, which can be used as guidelines for understanding, developing, and assessing the competence. Regarding the personal communication competence, the framework presents the following five indicators, which include between two and seven measures each:

- Provide clear and structured information to others and verify their understanding (applying).
- Facilitate and promote open communication (creating).
- Choose communication styles and channels to meet the needs of the audience, situation and management level (applying).
- Communicate effectively with virtual teams (creating).
- Employ humour and sense of perspective when appropriate (applying).

These indicators may be related to the Bloom's Taxonomy, which presents a classification of six levels of complexity for competences (Krathwohl 2002): remembering, understanding, applying, analysing, evaluating and creating (lower to higher-level of complexity). Thus, it is possible to make a relation between the previous five indicators and each level of the Bloom's Taxonomy. One should note that the taxonomy considers the accumulation of levels and, therefore, the highest level "create" integrates previous levels, even if not explicitly described. As an example, considering the second indicator above "Facilitate and promote open communication", someone with that competence (highest level "create") will also be able to remember, understand, apply, analyse, and evaluate, mobilizing facts, methods, and concepts in specific contexts.

The PMBOK project management framework recognizes that personal communication competence involves knowing how to use different methods and means of communication, creating and maintaining communication plans, knowing how to communicate in a predictable and consistent way, understanding the communication needs of stakeholders, communicating in a clear, complete,

concise, simple, relevant and personalized way, creating feedback/return channels, including important news, developing networks of people in all spheres of influence and the commitment of different stakeholders to the project (PMI 2017). Additionally, the PMBOK presents active listening, awareness of cultural and personal differences, identification, definition and management of stakeholder expectations and the development of communication skills among team members as some of the skills for an effective communication process (PMI 2017).

2.3 Scenario-Based Learning

Scenario-based learning (SBL) refers to any learning approach that intentionally includes the use of scenarios to realize desired learning intentions (Errington 2005). Scenarios are presented as hypothetical situations derived from professional practice that should be analysed, through the presentation of solutions and responses (Sorin 2013; Errington 2011).

Learners are confronted with a realistic description of a given situation (Errington 2011), in which they can assume specific roles or perspectives in order to explore the scenario from different perspectives (Errington 2011). The scenario thus serves as a basis for learners to explore different knowledge.

This approach, thus, enables the development of competences involved in a given context, through the construction and deconstruction of authentic learning experiences. This methodology is based on the theory of Situated Cognition and the valorisation of contextual knowledge (Errington 2011; Schank et al. 1994). This term reflects the idea that knowledge cannot be developed and understood entirely independently of its context (Schank et al. 1994).

The SBL learning process usually incorporates the simulation of real tasks and challenges similar to those encountered in the world of work (Errington 2011; Sorin 2013). The scenarios can be seen as stories about people and their activities, dilemmas and concerns (Carroll 2000). While simulation environments make it easy to visualize and explore the consequences of concepts, they do not fully replace traditional methods. Traditional methods can help to provide concepts and theoretical underpinnings for understanding and comprehending the simulated concept (Bannister 2018).

As referred above, scenario-based learning (SBL) has been used with success in last decades. In this sense, SBL may be innovatively explored for the development of communication competence in Project Management. Although there is no method of choice, experimenting with SBL can add knowledge to researchers and professionals who need to diversify their approaches to competence development.

2.4 Characteristics of Scenarios

Note that the more real the experience the scenario bring the better the results will be, so one should include in the experience tools that contribute to enhance realism and team collaboration (Clark 2009). So, scenarios must include characteristics such as being relevant and real to the participants, and they must be related to the professional context. Additionally, it should allow the development of new competences, dealing with a challenge and presenting a solution, taking into account the conditions in which the participants are included (Lourenço et al. 2007). Finally, scenarios can be located anywhere in time and in any simulated workspace, and may be examined in detail from a variety of perspectives (Errington 2011).

Each scenario should involve previously acquired knowledge or offer the opportunity for developing new knowledge, so that it can be mobilized to the task. This allows the learner to apply theoretical concepts to the simulated practice and promote the development of competences in a more integrated way. In this way, learners' motivation and involvement with scenarios and tasks is enhanced (Pappas 2014). The learner should, therefore, mobilize what he or she finds necessary to develop a solution to overcome any challenge the scenario presents.

Although it is not a recent concept, the way the teacher or trainer designs, develops, and assess the scenarios as an impact on the ability to prepare students for the labour world. Learner should generate hypotheses about the problems and try ways to provide an answer or solution to the problem presented. This process involves identifying what information is available about the situation portrayed, what information is needed, and establishing how they can obtain and integrate the missing information into the scenario. As a general rule, the scenarios mobilize groups and the results obtained are presented to all trainees in order to encourage debate and reflection around the scenario, mobilizing knowledge and skills for this purpose (Errington 2011) .

Based on best practices, O'Brien, Hagler and Thompson (2015) proposed eight steps for the scenario development process to be applied in assessment of competences: 1. Define the Purpose; 2. Select the Tools; 3. Review the Evidence; 4. Write and Map the Scenario; 5. Select a Validation Team; 6. Seek Consensus; 7. Pilot the Scenario; 8. Evaluate and Revise.

3 Methodology

Much has been written about the relevance of people competences in Project Management, namely about the impact of personal communication as a key-dimension for project success. However, less has been investigated about meaningful strategies to develop those competences, considering the specifications of the project environment. The objective of this paper, creating scenarios for the development of personal communication competences in project management, intend to contribute to this purpose. Thus, a qualitative exploratory type of study was selected, which can be defined as a research approach used to investigate a problem which is not clearly defined. The main purpose of this approach is to provide a better understanding about the research problem and point out new paths for future research (Stebbins 2001).

The study is organized in four phases, represented by Figure 1. Phase 1 is focused on designing the scenarios, which was supported by the work carried out throughout the literature review. This process included the following dimensions:

- 1) Studying the conceptual background of scenario-based learning, namely requirements for the design of scenarios, guidelines to consider in the implementation, examples, and cases to be used as inspiration.
- 2) Defining the constraints and prerequisites for the application of the scenarios. In this case the main requirements were to use a classroom with tables and chairs, and a 3-hour time for development of scenarios in a master's course in project management to less than 30 participants. The main prerequisites were that the scenarios should be applied to participants that would have a previous one hour talk about project management and competences with a focus on personal communication.

Moreover, the participants are expected to have an undergraduate 3-year degree on Engineering or Business knowledge areas. Thus, the scenarios should be applicable to project management master's students and also to professionals in the project management field, with at least an initial background on production or project management. So, the participants may include professionals with experience in project management and others without specific experience in this field.

3) Identifying challenges related to personal communication indicators and measures, to be considered in the design of scenarios. The research team considered the following four indicators to be able to focus the scenarios on a part of the competence development process:

- Provide clear and structured information to others and verify their understanding.
- Facilitate and promote open communication.
- Choose communication styles and channels to meet the needs of the audience, situation and management level.
- Employ humour and sense of perspective when appropriate.

The research team decided not to include a fifth indicator related to virtual teams by time constraints. Based on these decisions, the first version of the scenarios was designed, validated by a team of two research experts. Thus, the scenarios should reflect at least some of the measures defined for each indicator selected. The scenarios were revised and prepared for the next phase of the study, in which three scenarios were selected to be implemented in a training session.

Taking in account the exploratory nature of the study, a small sample was defined (Stebbins 2001). Thus, the research team implemented the scenarios (phase 2) with students enrolled on the "Master's in Engineering Project Management" in a Portuguese university. It should be noted that this master's is organized in after-work hours, so that the vast majority of participants are employed; the majority was at that time, or have been previously, employed on project management or operations management activities in different business contexts. The implementation of the scenarios was conducted during a 3-hour training session, within the context of the course "Development of Project Management Competences", in which 28 students were enrolled. A total of 24 students attended the training session where the three scenarios were implemented.

While the study was not conducted directly in a professional context, the participation of professionals created a research context adequate for collecting data for assessing the relevance of an exploratory study related to the implementation of SBL for personal communication competence development. During this phase, data was collected by observing the participants (Easterby-Smith et al. 2018) during the implementation of the scenarios, in which notes were taken by the researchers. Additional notes were also taken during the discussions after each scenario.

Phase 3 was dedicated to the organization of notes taken in the previous phase and also to collect data with the participants, one week after the training session. The methods used to collect information one week later were written narratives and focus group, aiming at to understand the experience of the participants and their perspectives about the scenarios.

Finally, in phase 4 of the study, all data was organized, and the content analysed using five categories identified in this study: 1) advantages of the scenarios for competence development; 2) limitations of

the scenarios; 3) main characteristics of the scenarios; 4) suggestions to improve scenarios; 5) competence development for the context of Project Management. As recommended by Bardin (1997), these categories were defined considering the objective and the research question of the study.

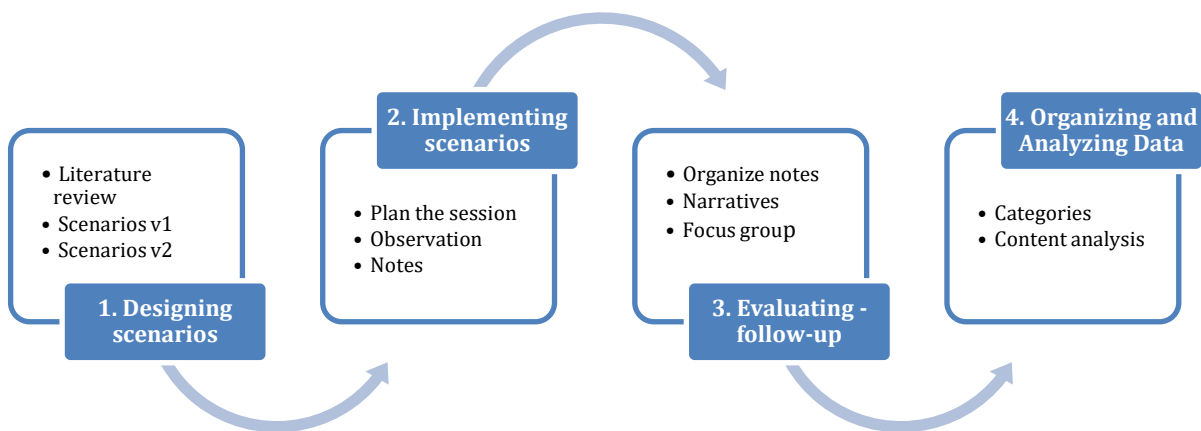


Figure 1. Phases of the study

4 Scenarios for Developing Personal Communication Competence

Scenarios aim to help participants to develop personal communication competence, so that they can communicate effectively and efficiently in different situations and to different audiences (IPMA 2015). In the context of project management, it is essential to select useful information and the means of communication to clearly reach the audience, check understanding of messages through active listening and seeking feedback, promote open and sincere communication and master different types of communication, recognizing the limitations and value of each one (IPMA 2015).

Thus, scenarios are situations based on the daily life of the project manager or the project team portrayed in the literature. The intention is that, in the application of the scenarios, the participants mobilize knowledge and skills proper to personal communication, with a view to conducting situations or solving problems portrayed in the scenarios. Thus, it is expected SBL may enhance the development of personal communication competences.

The main communication problems or challenges in Project Management have been highlighted by authors such as (Taleb et al., 2017; Čulo & Skendrović, 2010; M. Carvalho, 2008). These problems are often caused by ineffective communication, which can lead to delays, conflicts, and project failure. In addition, language, conceptual or behavior barriers between team members due to different backgrounds, may cause different perceptions about the same situation, creating problems faced by project managers. In this sense, some of the main communication challenges identified in the literature, mixed with the researcher previous experiences, inspired the design of the scenarios. The first version of the scenarios was reviewed by two experts against the indicators and measures of the personal communication competence. In this step, two scenarios were rejected and three were further improved until a consensus was reached on the acceptance of the scenarios.

4.1 Scenario 1: Urgent Document

The first scenario consists of simulating an example of ineffective project management communication. This is a roleplay exercise that includes three characters. The first character is the project sponsor, the second the project manager and the third a team member. Each of the characters (volunteers) receive a script with general guidelines on the role that is expected to be played and they have 5 minutes of preparation for the subsequent performance. It is important to note that the elements have some degrees of freedom to play the role, for example, by exaggerating body language. The class is organized into groups, and they receive instructions to register the aspects of ineffective communication that they identify in the representation of colleagues, considering the objectives of the scenario and using a record sheet distributed among the groups.

The roleplay consists of the following:

- The project sponsor (character 1) makes an appointment with the project manager to analyse the progress of the project. The project manager accepts the meeting regardless of the short time available and the difficulty of gathering the necessary information for the meeting.
- The project manager (character 2) calls a team member (character 3) aggressively, demanding that he/she gather all the information about the project and prepare a follow-up report for the meeting. The team member tries to explain that he can hardly, alone, deliver the report in time for the meeting. However, the project manager is so upset that he/she does not even let the team member speak. The team member in the face of the project manager's aggressiveness assumes a passive attitude and takes on the task even though it will be impossible to accomplish.

After the roleplay, each team should debate about the aspects of ineffective communication and about what knowledge and abilities could be mobilized in order to deal more adequately with the situation. After this discussion phase, each team is challenged to prepare a simulation of the same scenario, using an alternative approach using more effective personal communication practices in their opinion. This exercise, including the initial preparation time, scenario presentation and creation / presentation of alternative scenarios, is expected to take 25 minutes.

At the end, there is space for debate on the suggested alternatives, on the knowledge and abilities mobilized and on the communication issues identified. Specifically, this scenario seeks to explore the different questioning techniques, feedback procedures, different communication styles / body language and active listening.

The measures mobilized in this scenario relate to three key competence indicators, namely: Provide clear and structured information to others and verify their understanding; Facilitate and promote open communication and Choose communication styles and channels to meet the needs of the audience, situation and management level.

4.2 Scenario 2: Team Meeting

The second scenario consists of a roleplay exercise, where each element takes on a character. Participants are asked to organize themselves in groups of up to 7 elements and to appoint a project manager. Then it is explained to them that they will simulate a project meeting and that each member will receive a character, being expected that each one must act according to the profile assigned to

him/her. It is expected that, in each group, the project manager will be able to obtain the commitment of the different team members with the project and work around the different profiles represented in the best way. The scenario was expected to be completed in approximately 20 minutes.

The context of the meeting is presented as follows:

- The top management of an organization decides the implementation and certification of a quality management system and therefore need to form a project team and appoint a project manager to lead the project. The project manager decides to hold an initial meeting to get to know the team, answer questions about the project and commit / motivate the team to the project.

The project manager receives instructions on the topics to be addressed during the meeting and on the objectives to be achieved with the exercise. He/she should be able to:

- Structure the information in a logical way considering the audience and the situation.
- Use an accessible and easy to understand language.
- Lead and facilitate the meeting.
- Create an open and respectful atmosphere.
- Practice active listening and confirm what has been said, rephrasing what the speaker said in his own words to confirm understanding.
- Do not interrupt or start talking while others are speaking.
- Practice openness and show interest in new ideas.
- Confirms that the message / information is understood and, if necessary, asks for clarification, examples, or details.
- Make it clear when, under what circumstances and how, ideas, emotions and opinions are welcome.
- Make it clear how ideas and opinions will be treated.
- Choose the communication channels and communication style according to the target audience.
- Change the communication channels and style according to the situations.
- Modify the perspectives of communication and reduce tension through the use of humour.

The previous list shows the measures mobilized in scenario 2, and these are linked to the following four key indicators of the personal communication competence: Provide clear and structured information to others and verify their understanding; Facilitate and promote open communication; Choose communication styles and channels to meet the needs of the audience, situation and management level; Employ humour and sense of perspective when appropriate.

4.3 Scenario 3: Group Dynamics

The third scenario consists of a group dynamic where the participants are invited to organize themselves in groups and appoint a project manager. The appointed project managers are called aside to receive some general rules and how they have to conduct the exercise, where the team should deliver the longest “paper rope” using the material provided to them. Each project manager has 5 minutes to plan together with the team, followed by 5 minutes to perform the activities in complete silence using just one hand.

In this scenario each team should be able to mobilize communication skills such as: active listening, different communication methods, different questioning techniques, feedback, different communication styles and channels, and body language. In addition, it is expected that they will be able to structure the information in a logical way, taking into account the audience and the situation, practicing openness, showing interest in new ideas, using an accessible and easily understood language, patiently practicing active listening and confirming what they heard, reformulating what they heard in his own words to confirm understanding, confirm that the message / information is understood and, if necessary, ask for clarification, examples or details.

The measures mobilized in this scenario are related to the following key competence indicators: Provide clear and structured information to others and verify their understanding; Facilitate and promote open communication; Choose communication styles and channels to meet the needs of the audience, situation and management level.

5 Results

This section aims to present and discuss the results of the application of the scenarios and data collection process considering the perspectives of the participants of the study.

5.1 Advantage of the Scenarios

Participants, in general, appreciated the scenarios and found it to be an interesting, relevant, and dynamic experience. They reinforced the idea that this kind of activity is more appealing and facilitates the engagement with the learning process.

"In general, I found that all the scenarios allow us to analyse various situations, which can happen in the day-to-day of our professional life" (Narrative 1).

"I found it relevant to the topic and easily absorbed and understood." (Narrative 2)

This type of approach allows the whole class to be involved with the content and to develop knowledge and skills together. Additionally, the scenarios simplify the content and allow an easier absorption of knowledge, dealing with day-to-day situations, providing the security of a controlled and safe environment.

"(...) this method with the examples (scenarios) allows to bring some contact with the day-to-day for those who do not yet have experience with these situations; and for those who have experience, allow them to express what they already know, helping also the inexperienced, thus allowing a great exchange of knowledge, (...)" (Narrative 8)

"(...) participation in the scenarios helps to face situations that happen in the world of work, and reminds us that communication should not be neglected in any way or under any circumstances" (Narrative 6)

"The experience in the classroom allows an approximation with the professional world..." (Narrative 13)

Additionally, the participants reinforce the visual, practical, and dynamic characteristics of the scenarios, making it easier to understand some parts of the theme under study.

"The scenarios developed in the class were very important because, sometimes, just by listening and watching descriptions of specific situations we do not have the perception of how they really happen. I mean that when I visualized the scenarios, the impact was much greater than if someone had just told it." (Narrative 6)

This type of approach promotes reflection, self-knowledge, and critical sense, encouraging each participant to identify and work on their limitations.

"In my case I feel that I have evolved in terms of perceiving factors that are important in everyday life, whether for work or at a personal level, because they (the scenarios) made me reflect on my own competences; for example if I had certain competences more developed I could evolve as a person and help others evolve in terms of not having some setbacks..., because I think that at work there is no time for certain situations." (Narrative 5)

In summary, students recognize the contribution of scenarios to the development of competences, even though it could depend on their previous experiences.

"I believe that performing dynamic activities that force the student to leave the comfort zone and look for tools that allow them to face different situations, allows the student to develop their competences, especially those of communication (...)" (Narrative 9)

"I think that for most of the students, yes, it is an approach that instigates the development of communication competences more common in our daily lives" (Narrative 11)

5.2 Limitations of the Scenarios

Considering the perspective of the participants, the utilization of scenarios has some limitations, namely with lack of self-knowledge, lack of interest in learning through experience and shyness or lack of ease with group and interpersonal dynamics.

In the focus group, the importance of self-knowledge for the success of this type of approaches was reinforced. Usually, when people lack self-awareness about their own personal skills, they find it more difficult to learn or recognize that they need to develop competences in that area, especially when facing the development of personal competences.

"I think so, if the person has self-knowledge, that is, if the person already has some idea of what it is like with others. (...) We put people in a simulation to do certain things, "now you have to have this posture", (...) that will end up bringing, I think, a critical spirit about the situation; now if the person is or is not mature or has never analysed herself at that point I think she will be able to think that simulation is simply a game (...). I heard some colleagues saying that they don't like this type of dynamic because they don't feel like they are learning anything" (Focus Group, Participant 1)

Some participants state that they are personally intimidated or ashamed to actively participate in the dynamics:

"This is a very personal question, as I am a little more ashamed to actively participate in these dynamics." (Narrative 2).

"This learning model inhibits my understanding, as I end up tense and stop learning when I feel that way." (Narrative 11).

Personal interest in the dynamics influences the impact of the scenario, in the sense that if the student feels that the presented scenario will not bring him anything, regardless of the reason, he will not be able to recognize its value and learn something from it.

"(...) can only be enhanced if the person himself is interested in acquiring such competences" (Narrative 7)

"If the person was engaged I think that the person will achieve something, now if the person is in a posture of "I am being forced to do this to comply with the schedule", I think that it will end up losing the true

essence of this, that is to put ourselves thinking about certain situations or look at situations that we have already been or are placed in, but from another point of view.” (Focus Group, Participant 1)

Some of the participants had difficulties in being able to relate the scenarios presented with the development of competence.

“Initially, I consider that the relationship between the development of competences and the scenarios was not very clear at first, since the first scenario was framed in the face of specific orders, and the viewer was only able to recognize the way of communicating and not the link with the associated competences” (Narrative 9).

Another limitation identified was the lack of time for the application and conclusion of the scenarios and subsequent reflection, limiting the capacity for absorption and reflection on the themes addressed in the simulations:

“I think that despite being dynamic activities, the time was short for us to have time to perceive, to observe and, thus, to analyse ourselves.” (Focus Group, Participant 2)

“(…) contact with competences becomes superficial due to the short time of development” (Narrative 10).

In agreement with what was identified in the literature (Clark 2009), the importance of making a connection with the theoretical background is perceived as being important in order to get the best results from the scenarios. The theory plays a fundamental role in the acquisition of basic concepts and knowledge explored through the scenarios:

“Perhaps in these particular scenarios, some theoretical-practical conclusions were lacking, that is, confronting the different reactions and theories with the best practices, theoretical models, etc.” (Narrative 3)

“(…) it is important precisely from a point of view of the individual work that you present a little bit of theory (…)” (Focus Group, Participant 2)

5.3 Characteristics of the Scenarios

This section presents perceptions related to some of the main characteristics of scenarios, namely being based on a roleplay of real situations, dealing with uncertainty, applied with groups, and having clear objectives.

In terms of the characteristics of the scenarios, students reinforce the reality component, i.e., that scenarios should reflect as faithfully as possible the reality of the practice.

“The scenarios should present the situation as similar as possible to the day-to-day work” (Narrative 1)

“(…) to having a situation that we have been through, it will remind us of that situation and we may pull it to analyse that situation and compare how the situation is being shown (…)” (Focus Group, Participant 1)

The reality of the scenarios allows participants to identify themselves with the situation, hoping that they will be more involved in them. For example, creating uncertainty environments, dealing with scarce information or day-to-day failures and errors, are real-world situations and, for this reason, they become so important in the competences’ development process.

“Some with no solution at all or that do not generate success, to deal with the situation of the failure too”. (Narrative 8)

The objectivity of the scenarios is a fundamental characteristic. Participants must understand what they should achieve with each scenario, as well as understand what competences are expected to be explored.

"My question with simulations is to understand what the purpose of the simulation is" (Focus Group, Participant 1)

In the matter of collective or individual work, the degree of knowledge that the participant has of the other members is an important point. In the case of the participants already knowing each other it can be an advantage in the sense that each one already knows what to expect from the colleague and how to deal with the group. Alternatively, in case the participants do not know each other, it may inhibit the contribution that each one makes. Ultimately, it is recognized that scenarios involving groups makes the whole experience more complex, real, and rich.

"I think that what happened was that my group was made up of people I already worked with or get to know, and then communication is much more fluid, and maybe I don't have so many problems with being more direct, and then things end up "working". Because I think that doing this type of dynamic with groups or people who don't know each other, I think that the results would not be so beneficial or there would be an impasse in the first phase..." (Focus Group, Participant 1)

"This (working with unknown people) is a reality in companies" (Focus Group, Participant 3)

5.4 Suggestions for Improvements

Several participants in the study presented ideas for the improvement of the scenarios and of the application of the scenarios in slightly different settings. From this point of view, learners have demonstrated a high interest in the reality feature of the scenarios and suggested whenever possible to improve that aspect. One way to do that, would be by bringing up cases of real companies.

"(...) to bring up the case of a real company that went through difficulties and overcame "x" in a way and then, make a dynamic about it." (Narrative 13).

"(...) use more complex activities so that it could be more compared to what happens in companies" (Narrative 5).

"Real scenarios, within organizations that are developing some activity related to project management." (Narrative 10).

It is suggested to reduce the number of scenarios and to increase the level of complexity and similarity with the reality of the profession.

"I suggest reducing the number of scenarios and increasing the degree of complexity ..." (Narrative 10)

"Perhaps it would be more productive to reduce the number of scenarios performed and work more time on only 2 of them for example." (Narrative 3)

From the perspective of some participants, the scenarios could benefit from some visual support, since an image has much more impact than just a theoretical portrait.

"In my opinion, an image at the head of a stage is not as easily overlooked as a description." (Narrative 6)

5.5 Development of competences

Participants recognize that scenarios can help understanding the importance of competences, such as communication, for their day-to-day activities.

"I think that competence, especially the communication part is essential." (Focus Group, Participant 3)

"(...) the scenarios showed us the need for and importance of communication to achieve our goals" (Narrative 12).

During the experience, feedback was collected from the participants regarding the competences mobilized in each scenario. At the end of each scenario, the following questions were asked to the participants: (Q1) Select the competences that you mobilized during the realization of the scenario? (Q2) What other competences do you think have been mobilized?

For the first scenario, participants believe they have mobilized essentially the ability to identify different styles and profiles of communication (29%) and active listening (25%), from the presented list.

In the second scenario, the participants selected facilitation (26%) and body language (26%) as the main capacities mobilized during the scenario.

As the third scenario was more active and required a strong level of teamwork, the results for Q1 were slightly different. Thus, the results are mainly centred in body language (34%), facilitation (31%) and question techniques (27%). Active listening was perceived by a small percentage (8%) of participants.

The results obtained at the end of each scenario for the first question (Q1) are represented in Figure 2.

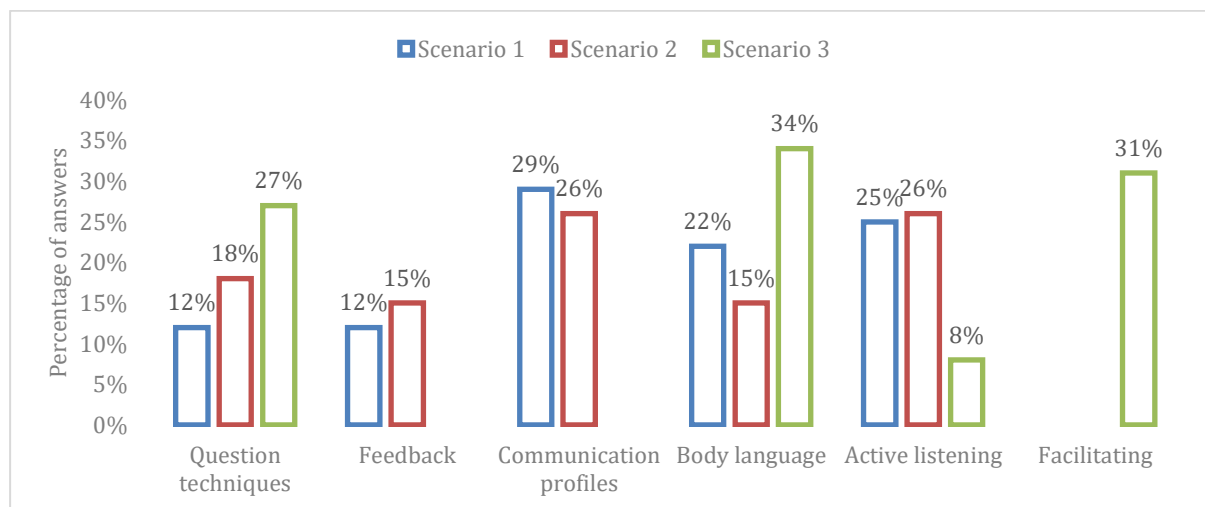


Figure 2. Perception about the competences developed with each scenario - question Q1.

Regarding Q2 (What other competences do you think have been mobilized?), participants were free to add new competences that they perceived as having been explored in each scenario. Thus, in addition to the previous referred competences, the participants of scenario 1 identified Empathy (28%) and Objectivity (21%). In scenario 2, the most frequently referred were patience (16%) and calm (16%). Finally, in scenario 3 participants highlighted teamwork (15%) and leadership (15%). The complete list of results of other competences perceived by the participants for each scenario are represented in Table 1.

These findings reinforce two main assumptions of this study with scenarios: the first, that SBL is a strategy that allows to develop competences beyond those that were defined in the design phase; the second, that personal communication competence has a high level of complexity, by one side because it has various links with other competences and, by other side, because in practice requires a wide range of knowledge and skills.

Table 1. Results of other competences perceived by the participants for each scenario.

Scenario	Other competences identified by the participants
Scenario 1	Empathy (8), Objectivity (6), Organization (3), Emotional Intelligence (3), Understanding (2), Team management (2), Patience (1), Tranquillity (1), Teamwork (1), Clarity (1), Social competence (1)
Scenario 2	Understanding (2), Patience (3), Tranquillity (2), Calm (3), Aggressiveness (2), Conflict (2), Assertiveness (1), Reliever (1), Attentive (1), Passivity (1), Convincing (1)
Scenario 3	Teamwork (5), Leadership (5), Organization (2), Demonstration (2), Interactivity (2), Communication (2), Creativity (2), Engagement (2), Coordination (2), Understanding (1), Clarity (1), Assertiveness (1), Encouraging (1), Constructive (1), Body language (1), Dialog (1), Planning (1), Helpful (1)

Regarding the data collected after the experience through the narratives and the focus group, we have a somehow different set of results related with the perceived developed skills. In terms of the developed competences, the participants identify active listening as the most mentioned skill with a total of 7 references, followed by the ability to use different ways of communicating and different styles of communication to be more effective with 6 references. The effective use of body language follows with 4 references.

With a total of three references, facilitation is referred and emerged has being linked with conflict management. Communication techniques are referred to by two participants and the techniques of questions, empathy, and feedback by one participant each.

Additionally, participants referred that the scenarios allowed to identify some aspects to improve their way of communicating.

"This experience made me realize that maybe I need to learn to present all the most important information initially" (Narrative 1)

"In some moments of the dynamics, for example, we did not share what should be done nor did we have pre-established and clear rules, so we had more difficulties than if we had clearly established the final purpose." (Narrative 13)

Some participants have shown difficulty in taking on other communication profiles or in dealing with other profiles.

"The difficulty I felt was having to play a role with a profile which I do not identify with, I ended up being the "aggressive" profile which I was unable to demonstrate effectively because it was not my natural characteristic." (Narrative 2)

"I see that I have greater difficulty with strong personalities, which led me to rethink this issue, as a manager." (Narrative 11).

One of the students presented his difficulty in controlling body language.

"I feel that my gestures, posture or facial expressions convey more than I want, and other times, they do not convey what I am feeling" (Narrative 6)

6 Discussion and recommendations

In general, students recognize that using scenarios promotes the involvement of the whole learning group in the development of team competences, facilitates learning and clarifies the content due to the visual, practical, and dynamic character of the experience provided by the scenarios. Additionally, it facilitates the development of knowledge and skills associated to day-by-day situations. Nevertheless, depending on the starting point of the learners and the learning objectives, one should note that complementary learning materials may be highly recommended. So, as any other learning activity, scenarios should be aligned with other strategies, materials, technologies, and assessment tools, in an adequate environment, to take full advantage of the development of competences process.

This type of methodology promotes reflection, self-knowledge, and critical thinking, encouraging each participant to identify and work on their own limitations, since the development of competences is a subjective and individual process. However, students were able to recognize that some personal aspects can impact the results obtained, such as lack of self-knowledge, lack of interest in learning through experience and shyness or lack of willingness with group and interpersonal dynamics. Even the previous experience of each participant influences how they positioned themselves in relation to learning by scenarios. In other words, the greater the contact with these experiences the better the impact on competences' development. This means that the individual work has a great impact on the outcome and can be the difference in the level of competence development expected.

There are also several suggestions for improvements both for new scenarios and for the scenarios presented, such as being closer to the context of a real company, reducing the number of scenarios presented but increasing the level of complexity, focusing the scenarios on aspects related to people management, communication profiles, conflicts, and stakeholders, increasing the level of information shared during the scenarios and increasing the time available for the experience.

Participants also recognize having worked on some personal communication measures such as active listening, effective use of body language, facilitation, communication technologies, questioning techniques, empathy, return rules, use of different ways of communicating and different communication styles. In addition to mobilizing this knowledge, skills and abilities, students were able to identify weaknesses that need to be addressed such as difficulty in managing information sharing, dealing with, or managing people with aggressive profiles, controlling their own body language, and taking on other communication profiles.

Despite scenarios presenting several advantages, such as the development and acquisition of the competences necessary for the success of students in the real context (Errington 2011; Sorin 2013), the ability to offer a rich practical experience (Errington 2011) promoting the ability to make solid and well-informed decisions (Kumta et al. 2003; Clark 2009), it is necessary to consider a set of factors when using this approach for the development of project management communication competences.

1. It is important to prepare the participants for dynamics of this nature. A good preparation, clearly explaining the objectives of the activity for their learning process may be fundamental to all participants and even more for participants that do not feel receptive to this type of approach.

2. Give a great emphasis to the reality feature when designing each scenario. This strongly contributes for engaging the participants.
3. The level of information transmitted, and the indications must be sufficiently explicit, and care must be taken to find a balance between the level of information to be given to participants.
4. Carefully plan the conceptual context in connection with the scenarios to increase the results obtained in the process. Theories, concepts, methods, or techniques are essential for a deeper understanding and apprehension of the situations or dilemmas.
5. Time planning is also a factor of the utmost importance, considering a balanced time planning for preparation, explanation, and discussion. Discussion is a fundamental part of the process to cement concepts and competences, and without this period of time students cannot reflect on everything they absorbed in the experience. Furthermore, it promotes sharing of experiences and the creation of new perspectives in addition to those experienced by the participant himself.

7 Conclusion

The importance of personal communication for the development of a project is recognized by most professionals in the area, as well as the literature of the specialty. Strengthening communication competences permeates other competences (IPMA, 2015), such as leadership, teamwork, negotiation, engagement, interpersonal relationships. It means to say that, mobilizing the competences evidenced in the developed scenarios implies strengthening other competences. The most common training methods focused mainly on the theoretical transmission of knowledge does not seem to be enough to prepare professionals for their professional life. Therefore, there is a need to present alternative approaches capable of preparing project management professional in more effective ways for working challenges.

Learning through scenarios presents quite satisfactory results, as it allows preparing learners for real situations related to the professional practice, through the development of competences in a safe simulated environment.

This work presented an exploratory study of implementation of scenarios intended to create an effective process for development of personal communication competence on project management. During the experience, learners proved to be participative and involved with it, as well as worked to fulfil the objectives presented. This openness and availability of learners were the key points for the experience to present significant results. After the experience, the participants were asked to share their perspective through a narrative or through participation in the focus group. The results of the data collection were organized into five categories, namely: the benefits of the scenarios, the limitations, the fundamental characteristics of scenarios, the suggestions for improvement and, finally, the competences mobilized. The whole process allowed to develop a set of suggestions for implementation of scenarios for the development of competences of project management.

This work has the common limitations of an exploratory study, that may not be generalized to other contexts. Additionally, this study focused solely on four out of five indicators of personal communication proposed by the ICB4. Being an exploratory study, the sample was somehow reduced, allowing to develop a qualitative study based on the perceptions of participants about the

implementation of the scenarios. This study did not include the trainer's perspectives, which could add new insights to the results. Moreover, the study was not developed in an industrial or business context, but rather with students, that are in its majority professionals, from a after work hours master's programme. Despite the limitations, it allowed to confirm much of the literature reported results from other areas of knowledge and create the base ground for further developments.

This work creates foundations to develop further work with scenarios, both for scenarios design, and for development and assessment of competences. Scenarios may be developed with the support of practitioners, based on their own experiences, issues reported during the development of projects, and identification of best practices. As for the measurement of competences, future studies may be developed for the design of assessment instruments that may support professionals, companies, and certificate bodies. Additionally, these instruments may be used for the evaluation of the implementation of SBL in future studies, using different methodological approaches based on pre and post evaluation of the competences.

Development of competences is of the utmost importance for the fast-changing need of competences of nowadays. Companies, professional organizations, and individuals may benefit from new and improved ways of developing and certifying competences of project management.

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