

THE COMICS AS TEACHING STRATEGY IN LEARNING OF STUDENTS IN AN UNDERGRADUATE MANAGEMENT PROGRAM



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ABSTRACT

Purpose: This article aims to evaluate the use of comics as an active teaching strategy in learning of students in a management undergraduate program.

Originality/gap/relevance/implications: The proposal presented in this article brings a theoretical-practical contribution to education in management, since it describes the steps for the use of a strategy involving use of comics as a teaching tool by the professor in the classroom, and also promotes the researcher's reflections on innovative teaching strategies for education in management in Brazil.

Key methodological aspects: The study is qualitative and the research method adopted followed the assumptions and steps of the action research of Cousin (2009): recognition, planning, action, observation and reflection. Cousin's description was adapted to the context of teaching.

Summary of key results: The results obtained indicate that using presentation of comics as a teaching strategy can enhance competence development, assist in the development of innovation and flexibility, and also contribute to reducing the gap between theory and practice. In addition, it can help students develop a critical sense, help to establish relationships between events and managerial situations, and encourage the exchange of experiences, assisting in decision-making and allowing students to represent a professional situation based on theoretical precepts. Finally, it contributes to the development of reflective practice in the learning environment and, in particular, promotes the development of creativity, something that was observed throughout the implementation of the strategy.

Key considerations/conclusions: It is expected that the study will contribute to the dissemination of the strategy in other programs and institutions and encourage teachers to use comics in the learning processes of their students.

KEYWORDS

Teaching strategies. Comics. Learning. Education in management. Active learning strategies.

1. INTRODUCTION

In the process of managers' education, some aspects limited professional development, such as the lack of interest of students (Santos, 2013) and the emphasis on a guideline linked to "teach to manage" rather than "educate to manage" which incorporates the process of education, in addition to the learning process and a set of activities organized to achieve educational goals, a guide to social practice (Silva, 2014), which highlights the need to institutionalize learning processes that are more experiential and action-oriented.

To create a learning environment that stimulates students in the process of education is part of what we think a "good professor" should do (Lima & Silva, 2014). It is essential to the learning process and to students learning what they need that the content indicated in a syllabus be made significant to them (Silva, Sonaglio, & Godoi, 2012).

For Masetto (2012), undergraduate teaching requires mastery of pedagogical techniques that require the professor to be aware of the process of teaching and learning, and to adopt a posture as manager of curriculum that integrates the learning modules into a broader framework, which involves the education expected of a professional. In addition, it demands understanding the nature of the student-teacher relationship and the relationships between the students, adopting new technologies that promote learning, reviewing the conceptions of student's evaluation, using techniques that encourage feedback, and carrying out the planning of educational activities oriented to the values of the individual as an agent in the transformation of society.

Active learning is associated with a set of teaching strategies, such as the alternatives proposed by Silva *et al.* (2012), to conduct the learning process in a manner that involves the learner's active participation: teaching cases, problem-based learning, simulations and business games. Other teaching strategies can also contribute to the learning process, such as, for example, the use of movies, comics, conceptual maps, seminars, discussions forums and symposia (Anastasiou & Alves, 2004; Wood, 2008; Oliveira, 2014).

This article aims to evaluate the use of comics as an active teaching strategy to assist students' learning of specific concepts covered in a course in the undergraduate Management Program of the Federal University of Paraíba (UFPB) in Brazil.

In the next section, we present the theories that underpin the debate on the subject. Then, we describe the methods used in the research and the results achieved. Finally, we reflect on the strategy of using comics in the learning processes of students.

2. THEORETICAL BACKGROUND

Some might argue that all that is necessary for the practice of teaching is to know the information pertinent to the course well, thereby denying that there is a need for specific teaching strategies or plans. Because there is a core belief in the university as a bastion of academic freedom, the classroom has been understood as an absolute domain of professors, which has led many teachers to look only to presenting the course material, forgetting the student, who still lives a drama between the subjective and the objective, theory and practice, the concrete and the abstract, order and disorder (Gil, 2005).

In the university context, the presence of the traditional pedagogical model is predominant and is marked by the notion of professors as unquestionable imparters of knowledge, passed on to students through an extremely expository approach by the teacher, in which there is a lack of interaction between professors and students, as well as among students, students are expected to memorize information, and the classroom atmosphere is individualistic and competitive (Pimenta & Anastasiou, 2010).

Thus, there is a need to modify these sorts of teaching strategies to integrate theory and practice into the learning process in the classroom. It is interesting to consider why prevailing teaching strategies do not do so, and the answer appears to lie in the prevailing atmosphere in the universities, as well as the conditions and characteristics of the training of professors that shapes their views of how students learn (Lima, 2011).

Therefore, Lima (2011) notes that universities should be more concerned with the process of managers' education regarding the world of work and preparing professors to plan teaching strategies that will to increase their effectiveness in the classroom. It is much easier for professors to work out specific teaching methods they will use, according to Lowman (2004), when they can identify what they want their students to learn and be able to do at the end of their course.

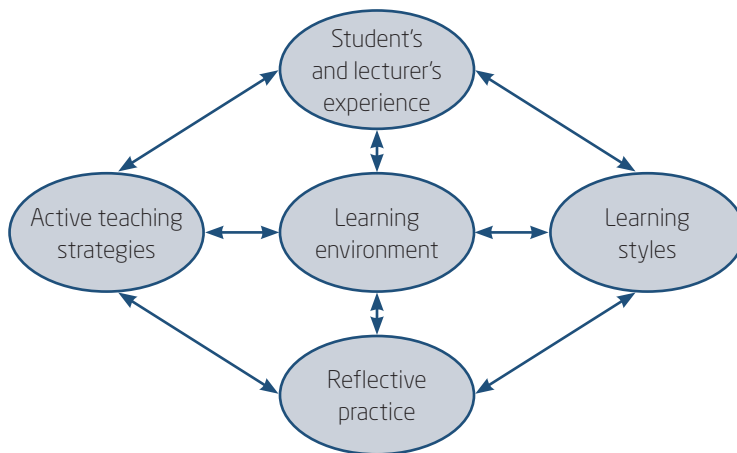
The adoption of innovative teaching methods is discussed by Souza, Iglesias, and Pazin-Filho (2014). One of the aspects indicated by the authors is migration movement of “teaching” to “learn”. In addition, there is a shift of focus from the professor to the student, who assumes responsibility for their own learning, thus valuing the learner’s ability to learn and the development of individual autonomy and communication skills. These innovative teaching methods make the students’ learning process more integrated with meaningful experiences in their own lives.

In the context of management, the adoption of active or innovative teaching strategies can encourage students to perform more activities during class, seeking to make them active participants in lectures and help them develop critical thinking, independence and problem-solving abilities.

Based on their theoretical reflections involving learning in the context of education in management, Silva *et al.* (2012) propose an active learning system with five dimensions that was later modified by Silva (2016) based on the results of empirical studies. Their model is depicted in Figure 1.

(Figure 1)

ACTION LEARNING SYSTEM IN EDUCATION IN MANAGEMENT



Source: Silva (2016).

For Silva (2014; 2016), understanding the process of education in management demands the need to carry out more studies on each of the dimensions, but the action learning system seems to attend to the three requirements that permeate the term education in management: learning processes, the organization of activities for achieving the educational objec-



tives and the relevance of social practice in the process of managers' education. According to the author,

[...] the learning process in a course of Management should be concerned not only with the technical dimension of education with theoretical implications for practice, but it would also have to incorporate a social, political, cultural and historical dimensions, which characterize the uniqueness of the managers' education (Silva, 2014, pp. 1-2).

Active learning strategies that integrate the action learning system for education in management can enhance learning because they articulate theory and practice, reflection and action, from lived experiences in the context of education aiming to prepare the student to enter the workplace. In addition, the use of teaching strategies can make the "pedagogical practice ethical, critical, reflective and transformative, beyond the limits of purely technical training, to effectively achieve the education" (Souza, Iglesias, & Pazin-Filho, 2014, p. 285).

The diffusion of active teaching strategies demands the training of professors and students, who must be engaged and interested in learning in a more meaningful way. This implies a greater engagement of students at various levels of participation – individually, in pairs or in small groups – in discussions that are significant and widespread in the classroom environment (Wurdinger & Carlson, 2010).

There are several active learning strategies, such as teaching cases, problem-based learning, simulations and business games (Silva *et al.*, 2012). The teaching case is not a research method, but it describes a business situation or profession and a dilemma that gives the student the opportunity to be a decision-maker. Thus, this strategy presents aspects of real situations and develops in the student the ability to critically analyze the decision-making process adopted. The problem-based learning approach also arises from a real investigation that stimulates students to solve a problem through critical thinking in a field of knowledge. The simulation strategy exposes the student to a practical situation in which, as a group, students identify and plan new business actions, while business games are sequential exercises in which students make decisions about problems linked to the field of knowledge and its practice (Lima, 2011).

As the students are adults, the use of teaching strategies oriented toward action stimulates participation and involvement because it allows the association of content with the experience, the professional reality, problems and issues of the area and their needs, involving the student in the



process of driving the development of new competences and skills (Borba & Luz, 2002).

In the context of education in administration, most active teaching strategies seek to help the students become protagonists of the learning process, and its epistemological bases are associated with experiential learning (Merriam & Bierema, 2014; Fenwick, 2003) and action learning (Raelin, 2009; Marquadt, Leonard, Freedman, & Hill, 2009), in order to make the learning process more reflective (Schön, 2000; McGill & Brockbank, 2004).

The dissemination of teaching strategies oriented toward action learning can enhance the process of business administration training through a greater articulation between theory and practice, reflection and action. One action learning strategy that is student-centered and can enhance creativity and innovation in teaching, a quality that is uncommon in the teaching of undergraduate management courses in Brazil, involves the use of comics.

2.1. Use of comics as teaching strategy

It is said that comics have existed for over 40,000 years, since the first cave paintings (Guimarães, 2001). Until the 1970s, the use of comics was not seen much in Brazil. Conflicts between educators, teachers, and even bishops mark a history of favorable and unfavorable conceptions of the use of this learning strategy. In subsequent decades, it has been possible to observe the use of comics in the classroom, even if subtly. Starting in 2006, the use of comics was incorporated into the National Curricular Parameters (PCN – Parâmetros Curriculares Nacionais) drawn up by the Federal Brazilian Government as a genre to be used by teachers (Ramos, 2006).

Comics are representations of the “oral in writing” (Ramos, 2006, p. 7), expressed by means of characteristic elements, such as the outline of the balloon (which indicates the intonation of the voice), the shape of the letters (which may indicate a feeling, an action. A larger letter, for example, may indicate that the character is screaming; shaky handwriting, the character is scared), using onomatopoeia (indicating sounds made by the characters), among others. Comics are “artistic expressions that try to represent movement through static images” (Guimarães, 2001, p. 3). Ramos (2006, p. 84) explains that, if used properly and planned, the comic “can achieve concrete results in learning such as instigating the debate and reflection on a particular theme”.

To Eisner (2010), comics are considered a sequential art, a vehicle for creative expression, an artistic and literary form that works with arrays of



figures or images and words to tell a story or dramatize an idea. For Jensen, Voigt, Piras, and Thorsen (2007), in the context of management education, the use of drawings is a method that may favor a particular dialogue between people and groups and may characterize an expression of the context. In addition, it may help students to express their emotions during the learning process.

There are several purposes of using comics in education. They have been used as a tool in the teaching of sociology of sports in a study by Snyder (1997), who reported his experiences as a teacher in a suburban high school. Also, comics can be used for “registration, disclosure and even scientific knowledge production” (Guimarães, 2001, p. 15) and to improve the speaking ability of students below average in speech (Glaeser, Pierson, & Fritschmann, 2003), and also to teach spoken Portuguese (Ramos, 2006).

The comics are also used to make medieval history classes more attractive or even encourage the participation of students in disciplines with highest disapproval, such as mathematics and physics (Langer, 2009). They have also been used to check with students from the second and third years of primary education about their retention of information about correct postural habits (Rebolho, Casarotto, & João, 2009).

In 2009, high school physics teachers introduced the ideas of Einstein in the classroom through the development of comics made by students. The teachers understood that this teaching strategy is one source of motivation for presenting words and images in a “perfect interaction” (Caruso & Freitas, 2009, p. 359). The encoding and decoding processes that students experience in the creation and interpretation of comics become learning facilitating elements because there is a need for concentration. Thus, the strips can be used by teachers to “arrest the attention of students” at a time of fierce competition with other forms of interaction.

The studies reported comments and clarifying questions about the use of comics in a variety of situations and indicated the contributions of such use. However, it is not easy to find studies showing the use or development of comics by the students (Rossetto & Chiera-Macchia, 2011; Kiliçkaya & Krajka, 2012).

The studies of Rossetto and Chiera-Macchia (2011) reported the use of comics in teaching the Italian language. In this case, the researchers asked the students, as a group, to build a story with a part of it written in Italian in comic form. They asked them to submit the story and then deliver a written reflection on their experience with the activity. The authors perceived that the activity helped in the development of memory, analysis, and reasoning,

decreased anxiety through interaction with others, and encouraged reflection and creativity in learning another language.

The study of Kiliçkaya and Krajka (2012) sought to identify whether students liked to create comics to facilitate their learning process. The students spent five weeks creating the comics virtually and in class, and at the end of the process, sent the material produced to the teacher. The material was subsequently reviewed and commented on by the entire class. In the end, of the 25 students who participated in the process, 24 claimed they liked to participate in the activity. The authors indicated that among the contributions of the use of the comic genre in teaching were the development of autonomy, freedom, and creativity and still the fact of being a student-centered education strategy.

In education in management, the process of creation of comics by the students can be considered an active learning strategy, since it stimulates the participation and the interaction of students in the classroom. The use of active learning strategies can contribute to the development of the ability to think and reflect about professional practice, making the learning process more meaningful.

Wurdinger and Carlson (2010) highlight that active learning helps students to feel more free to express their ideas, which may contribute to unexpected and interesting discussions. Still, they point out that the teaching strategies focused on fostering active learning are more effective because they allow students a greater engagement in the learning process “and create environments where students explore ideas, challenge the ideas of others and think critically about their feelings” (Wurdinger & Carlson, 2010, p. 18).

For Jensen *et al.* (2007), the drawings can be used as a research method to capture emotional and aesthetic aspects of the experience and can also be a way to acquire knowledge and generate interpretations of research participants. The use of drawings in management learning involves its capability to represent a variety of specific dialogues within a given context, whether at the intra-interpersonal or intra-intergroups level.

In this study, comics were used as a way of representing the knowledge acquired by students from theoretical reflections with a context of professional action. So, as a strategy for teaching, comics can help students to express and represent a professional situation which features the application of theoretical knowledge in the context of managerial practice.

In the following section, the methodology of the study is discussed. As stated by Guimarães (2001, p. 5), the comics that are used for the representation of scientific information must “be as accurate as the researchers who

are producing Science. In other words, they should incorporate all the features of scientific behavior, such as objectivity, factualness, impartiality etc.”

3. RESEARCH PROCESS

The study follows the assumptions of qualitative research and uses the action research approach proposed by Cousin (2009), which can be disseminated in the field of education and is linked to a movement of the professor as a researcher. The approach is suited to research changes in the daily context, in natural contexts as well as in controlled environments, such as the Practice and Research Observatory where the study was conducted and promotes “education with research” or “research with education”.

The survey was conducted with 21 out of 29 students enrolled in an undergraduate Management course at the Federal University of Paraíba (UFPB) in Brazil. The course, under the title of “Decision Making and Managerial Development”, took place during the first semester of 2015. The Management program focuses on the development of personal and professional attributes to help future Administrators in the development of managerial competencies. The objectives¹ of the course are listed below:

- identify the activities and the roles of managers in the context of organizations;
- understand the dynamics of management and the nature of managerial action;
- understand the decision-making process and the reflective practice of managers in organizations;
- analyze the managerial development process;
- discuss management action in a subjective and multidimensional perspective;
- simulate the decision-making of managers in the context of organizations.

An experiential learning approach was adopted in the course, in order to encourage participation and the development of reflective thinking of the students. To make the learning process more meaningful, we used different teaching strategies such as: news panels, discussion forums, reflective

¹ Objectives indicated in the syllabus in the first semester of 2015.

writing, conceptual maps, teaching cases, and comics. The objective of the use of comics was to help students to analyze the managerial development process from the theoretical perspective of social learning.

The steps of action research proposed by Cousin (2009) include recognition, planning, action, observation and reflection. This description was adapted to the context of education for purposes of this study, allowing the characterization of comics as an active learning strategy.

The data that were collected were the reports of the experience by the group of students involved in the activity, as well as the transcription of the class dialogues in which the results of the activity were presented and discussed by the students in the classroom. The analysis of the data involved content analysis of the reports of the group students and of the transcription of the class dialogues.

4. RESEARCH RESULTS

The teaching strategy of comics can be used to get students to reflect on a given theme addressed in the course of the Management undergraduate program. The strategy can be used in two ways. The first involves having students reflect on an experience related to a decision, a change, aspects linked to human behavior, or a lived experience of a situation of consumption of a product or service, among others. In this approach, students would have a great deal of freedom to create the comics in the manner they see fit, and subsequently the process of evaluating the comics produced takes place under the guidance of the professor to discuss the theoretical aspects involved in the stories reported by the students.

The other way to implement the strategy in the classroom is more structured from a theoretical point of view, since the professor initially covers a specific curricular content and then prompts students to prepare a comic that represent one or more theoretical concepts addressed. In this article, we have adopted this second form, because the goal was to have the students reflect on the applicability of the content discussed in the context of professional administrator action.

In both ways of implementing the strategy, the professor works to develop the creativity of students, their reflective practice, teamwork, and their ability to integrate theory and practice, and stimulates self-directed learning.

It should be noted that no studies were found to provide a method for the construction of the comics to support the professor's action, and



creating such a method is the main contribution of this article to education in Management.

4.1. Description of the teaching strategy of comics

The characterization of the teaching strategy of the comics is the result of a process of research on teaching, and its development followed the steps of the action research proposed by Cousin (2009).

The *recognition phase* began with the presentation of the strategy of creating comics in the classroom by the professor to the students. Initially, they were presented the goals of the activity: to establish connections between plausible and experienced situations involving the social learning process of a manager, looking for the role of context in the indicated process of social learning by a manager; and to lead students to reflect on the fact that the theory is not disconnected from reality and the comic could help to produce a representation of this reality.

The *planning phase* of the activity involved guidance on the process of elaboration of the comic, and the first stage involved an activity of individual reflection, in which each student was asked to think about a scene that represented the management learning process according to the assumptions of the theory of social learning covered by Silva (2009) that had recently been discussed in the classroom. The student was asked to think about the situation and establish a sequence for a scene of a simple action. The first stage lasted 30 minutes.

Then, the students formed small groups according to their learning styles, which had been assessed via the inventory proposed by Kolb (1984). This measure was necessary because the activity is part of a broader program of research on the diffusion of an action learning system for education in management and is intended to illuminate the links between the dimensions of learning styles and active learning strategies.

At this stage, the groups received the following guidelines for carrying out the development of the comic scene: 1. in a comic, the time is divided into sequences (beginning, middle and end). So, it can include boxes of different shapes and sizes; 2. the reading of the boxes together allows you to capture the action performed by the characters; and 3. bubbles (spaces where usually the dialogue is written) can be different according to the objective of how to represent a thought and/or dialogues. To facilitate the development of the string from the scene, students were presented with five different examples of structures with sequences of comics. In small groups,

the students presented their proposals arising from the individual reflection and, after the definition of a scene for the entire group, there was a reflection on the theoretical concepts that oriented the representation, the characters involved and the dialogue between them. This phase lasted 90 minutes.

The *action stage* involved the development of the comic, which was performed in groups outside of the classroom, and it was recommended that the students use an online software program named Toondoo (www.toondoo.com). In addition, each group drew up a description of the scene and a reflection on all the moments experienced during the construction of the comic, which were delivered to the professor on the day of presentation. The last two steps of research, *observation* and *reflection*, were carried out in the classroom and lasted 120 minutes.

Each group held a presentation of the comic scene, in addition to theoretical reflections related to it. The professor had the role of encouraging students to reflect on the theoretical concepts discussed. The comic strip scenes pertained to management practice situations, a topic previously discussed during the course.

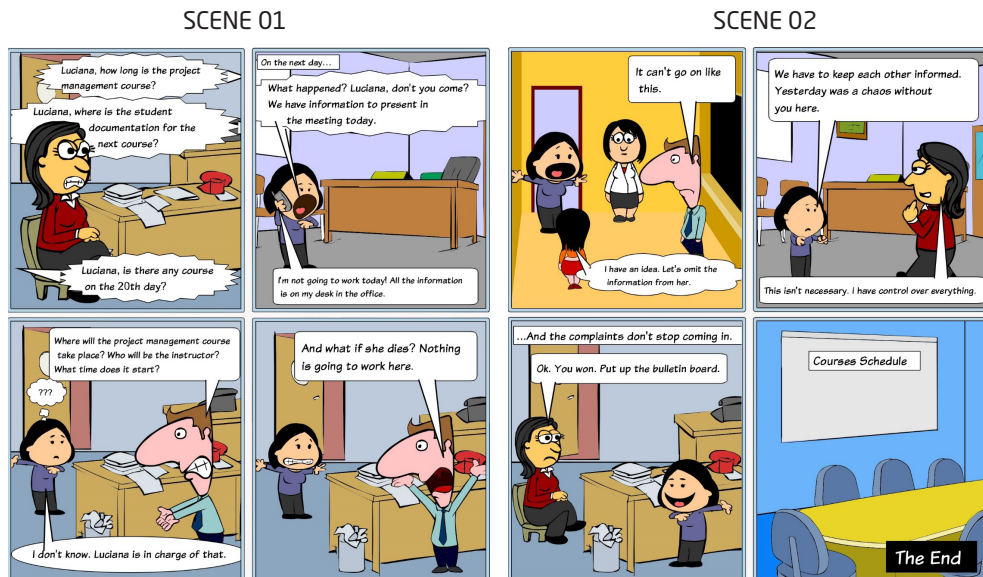
The activity of developing a comic took place in five groups of four, five or six participants. In the next section, the activity will be exemplified through the presentation of one of the comics produced and a descriptive analysis of its representation of the theoretical concepts discussed in the course.

4.2. Description of a comic produced by a group of students

In this section, we will describe one of the comics drawn up by students. For this, we used the scenes of the comic, the transcription of class dialogues which represent the description thereof, as well as the report of the experience prepared by the group. It should be noted that, throughout the strategy, students reported that the whole process was part of a research and we requested its authorization for the use of comics as research material.

The comic presented below features the influence of the context in managerial development and its preparation aimed to carry out a reflection on the factors that contribute to understanding how managers learn. Students in the group that drew up the comic sought to explore how manager centralization affects the progress of the activities of the company because the knowledge is not disseminated to the group.

(Figure 2)
COMIC STRIP



Source: Research Material.

The first comic scene describes a situation where the Manager, Luciana, who is centralizing and does not share information with her employees, attempts to communicate via a phone that won't work, and creates a social context in which centralization and lack of knowledge about the processes hinder team development activities. Luciana needs to distance herself from the office for a few days to deal with family problems and calls for another employee to take over his role. Because of her centralization, and when a client was seeking information about a course, and the employee does not have it, the client was angry and dissatisfied.

The managers' behavior impaired the learning of your team in relation to the worker processes, which indicates that the social context of learning can be prejudicial when the manager doesn't share her knowledge with the team. The scene also reveals the behavior of one of the employees, who justifies the lack of information because of the lack of information and the centralization of the manager.

The 2nd scene illustrates a group discussion about the need for change and also depicts the behavior of an employee in suggesting that they could also omit the information to the manager. Another worker seeks the mana-



ger and presents a different speech from the first comic scene, emphasizing the need to share the information from the lived experience of the previous day. The manager keeps her centralized behavior, but she is convinced that the strategy of giving more visibility to information about training could avoid the problems that occurred in the 1st scene.

In the document of the report experience and also during the presentation of the group, the students described several behaviors involved in the scene, represented in the characterization of the characters. In the first scene, for example, faced with several questions, the manager appears to be stressed. Another behavior that reveals the lack of control over the process occurs when she calls the company and indicates to the employee that the information to be provided in a meeting is on her desk in her office.

One of the concepts explored by the group is associated with the manager profile and the resulting lack of legitimacy of Luciana in relation to her work team. How students should prepare the comic from the concepts involving the role of social context in learning, the link with the theory occurred during the presentation when students reported the importance of the involvement of people in the workplace, the implications of the lack of team spirit, and how the lack of confidence of the manager in disseminating the information, represented by the centralization of power and control, hinder the smooth running of activities. What hindered the legitimation of the manager was her management style being so centralized and also the lack of confidence in her team.

Students highlighted in the presentation that the change in Luciana's behavior in the last situation represented in the 2nd scene occurred as a function of external and internal pressures in the social context. An interesting reflection arising from the presentation of the group arose from a student, who reported:

I experience this in my internship because my boss likes to keep information for a person seem to be dumb, but it occurred at the start, because I already had fought enough with him. He said: "I'm going out to do something". He came out and he couldn't show up and hang up the phone. Then the person was in the room without knowing what to do and, as soon as I arrived, I didn't know anything about it, had nothing to do and was complaining because he/she didn't know. In my case, I said, 'all right, when you leave, I go out, I'm not going to stay, I won't be the stupid one this time, no, I'm not, I can go through anything, but dumb, no'. Then he began to show, but gradually, it was like her (the student who presented the Comic) said: by a pressure.



Upon hearing the account of the experienced situation, another student said that he had already experienced a similar situation, which reveals that the teaching strategy of Comics is able to take the students not just to reflect, but to share lived experiences in the professional context.

4.3. Implications of the use of comics in students' learning

The results in this section were developed from the reports of students' experiences, as well as the transcription of the class dialogues in which they presented the results of the activity.

One of the greatest challenges indicated by one of the student groups was to choose the key concepts and align them to scenes that should be drawn up. It demanded an individual and collective reflection on the whole process of developing the comic.

It is important to note that the experience of thinking individually and thinking in group had a different difficulty level for each one. Few could imagine the situation more clearly while team, while for others, the process of imagination followed a more fluent structure. It should be noted that the retraction of the Comic strip came from the group's understanding that it is possible to learn how not to be (report of the experience of the Group 1).

The description of the process of construction of the comic by the group also illustrates that it is a creative process that involves imagination and reflection around a thought that is structured from the interaction.

The report of another group establishes what the construction of the comic strip was based on:

The premise for the development of the Comic strip was that the human being is multidimensional, since the factors external to the organization's environment will influence your performance. It is up to the manager to consider these variables, for which the employee can develop in the organization, it's necessary that occur a follow-up on the part of the human resource manager, that should structure your actions so that the employees have basic tools to achieve better productivity and satisfaction at what they do (report of the experience of the Group 5).

The comic of group 5 described the dilemma of a collaborator in relation to his personal life, his dissatisfaction with his relationship with his spouse



and children, and the impact of family life in the work environment, revealing that the professional context is influenced by the context of personal life. To reflect on this theme, students demonstrate that the work environment is multidimensional and the human resources manager has the role of helping employees cope with the difficulties of everyday life.

It was noticed that the development process of the comics in the groups was also marked by conflicts among those with different learning styles and the great diversity of ideas that emerged in individual reflection and that demanded the definition of the set and the characters during the stage of discussion in the group.

Through the groups' presentations, it was apparent that the use of comics transfers to the classroom (enshrining its limitations, because it's a controlled environment) aspects that involve the organizational context, such as creativity, innovation and flexibility, assisting students in rapprochement between theory and practice. The use of creativity for students, in particular, was observed throughout the implementation of the strategy.

The following reports have confirmed these conclusions. A group of students tried to describe the character created in their comic incorporating physical and behavioral elements and even sensations. The second report is about the professor, who makes a general characterization of the comics presented, emphasizing creativity. And the third is a group of students who explain the development of the comic strip with support of the theory.

Students of Group 1: The emotional intelligence of Luciana is jeopardized because, as we can see in the first comic strip, many people are asking information from her, but her face is a countenance of a highly stressed, that couldn't master the processes. So, there is a great disorder and she herself couldn't police... and even situations in which even people were trying to raise awareness of it, she couldn't look at it. It appears she is saying: "all the information is on my desk office". Then, she thinks that just putting the papers with the instructions of the training courses would be enough to promote knowledge within the company.

Professor: What's interesting in the Comics of all the groups is the characterization of scenarios. The scenarios are very different, right? We have a scenario linked to a situation of a company that involves training, another that is already an industrial company that manufactures machines and you bring in a perspective of a mechanical workshop.

Students of Group 3: We can realize those topics that we put there were precisely the concepts that we use of the theoretical chapter



and tried to include within the Comic strip, for example, the community of practice, which was one of the things that we discuss last class that demanded a certain engagement, a team spirit, we saw that in this sector had only a simple division of the work, but there was not all involvement, a matter of trust. This issue of legitimacy was also impaired within the work environment because people saw that they did not have a trust with respect to all the work that was being developed.

According to the module of the undergraduate course about decision-making and managerial development, students need to experience situations that involve decision-making. It was clear that in decision making the students included aspects about customer information, workers and pressure for results, managers' personal life, and family experiences.

As a result, promoting active learning, the use of comics contributes to competence development, as it may lead students to understand that the administrator needs to have the capability "to deal with complex demands in a particular context, a complex know-how, resulting from integration, mobilization and adequacy of capabilities, knowledge, attitudes, values used effectively in real situations" (Gómez, 2011, p. 84).

The learning process is facilitated by allowing students to engage in situations that require the development of critical sense by means of reflection. In this sense, the process is facilitated by the use of comics, because it boosts the exchange of experience among students and between professors and students, and imposes the need to establish relationships between events and managerial situations. As a result, groups sought to represent professional situations buoyed by theoretical principles that fostered reflective practice. Reports from students during the presentation of the Comics illustrate these contributions:

Group 1: The environment could be favorable for Luciana to learn, but as she does not allow herself, she only **learns through pressures** of own routine, so these life issues of manager, **individualism**, the systemic view takes her to close in that environment and just then, with an external pressure, that the people started to participate due to a necessity.

Group 3: It was a **meeting**, itself, of the **company's routine**, where all the managers were present and then one of the managers comes to community of managers and ask if they have managed to **solve the problem** of brakes that a certain type of car was in trouble.



Group 2: It is very complicated because most people who do it often do not have this **self-knowledge**. They think it's okay, that's all very nice, but **inside their heads**, they **can't learn nor facilitate the learning of people**. In this comic strip, we wanted to show that it is also possible to **learn how not to be**.

Group 4: We created a fictional company that is the Clani, the junction of our names' initials. Hence, the scenario that we brought was the following: Clani is a company that, in addition to **manufacturing**, it makes the sale of washing machines, which is our specialty. The machine is gray or white color, washes on an average of 40 minutes, and is suitable for different types of clothes, three levels of water, tempered glass lid, multifunctional shaker, inline filter, fabric softener compartment. We tried to create the Comic strip with a **context of community of practice** that is rightly the **client**, randomly is not identified, a **group** that is not identified, they pass their needs to **sellers** and **sellers communicate to their managers**, so they can attend that demand that was requested.

In these students' reports, it is apparent that they seek to represent the reality experienced in various managerial situations, in the process of problem solutions or in the daily routine of management practice, marked by pressures, individual attitudes, need for systemic vision and quest for self-knowledge. Also the role of knowledge dissemination and their contribution to the learning processes was revealed.

An aspect revealed in the report of the experience of group 5 is that they are bound to learn from mistakes. The group experienced problems associated with teamwork, because, although all members had contributed to the proposals and participated in the construction of the Comic strip, the final adjustment was the responsibility of one of the participants, which created a dependency relationship in this group. Reflection in the group about what they considered an error in the process was as follows:

The experience we have gained in this work was one of the most rewarding moments, because nothing like experiencing something and take this learning experience, in other words, nothing like learning from our own shortcomings, because this situation leads us to a great reflection for this not to happen again (report experience of the group 5).

From the reports of the experiences of the use of comics, it was possible to notice that the learning process of the students was potentiated by

means of this strategy, as it had already been reported by other researchers (Caruso & Freitas, 2009; Rossetto & Chiera-Macchia, 2011; Kiliçkaya & Krajka, 2012).

5. FINAL CONSIDERATIONS

This article sought to evaluate the use of comics in students' learning of specific concepts covered in the course Decision Making and Managerial Development, from the Undergraduate Program of Management of the Federal University of Paraíba (UFPB), in the first semester of 2015. This course was developed at the Centre for Research and Practice in Management, which aims to promote actions of “teaching with research” or “research with teaching” to enable the deployment of an action learning system for education in management, coordinated by one of the authors of this article.

The research method used followed the steps of action research proposed by Cousin (2009): recognition, planning, action, observation and reflection, whose description was adapted to the context of education. Thus, all data analyzed in this article were from the accounts of the experience by groups of students involved in the activity, as well as the transcription of the class dialogues in which the results were presented and discussed, which was recorded with the prior consent of the students.

The results obtained indicate that the strategy of using comics facilitates competence development, assists in the development of innovation and flexibility and helps to reduce the gap between theory and practice. In addition, it develops critical thinking, helps to establish relationships between events and managerial situations and encourages the exchange of experiences, assisting in decision-making and allowing the students represent a professional situation based on theoretical precepts. Finally, it contributes to the development of reflective practice in the learning environment and, in particular, promotes the development of creativity, something that was observed throughout the implementation of the strategy.

One of the difficulties faced by the students was the lack of knowledge of the software tools Toondoo (www.toondoo.com) during the creation of the Comics, which led one of the groups to seek another tool and make use of the software Make Beliefs Comix (<http://www.makebeliefscomix.com>). However, this difficulty was being reduced from the practice of the handling of the tool, which demonstrated that this difficulty was no greater than any other when one is faced with a new challenge.

The use of active strategies in management courses has increased in recent years, but is still considered incipient. Similarly, the use of the specific strategy of construction of comics, adopted in this work, is also little utilized in teaching. So, we need to deepen their use to enhance the teaching of management. Some work with comics has been identified in other areas of knowledge (Caruso & Freitas, 2009; Rossetto & Chiera-Macchia, 2011; Kiliçkaya & Krajka, 2012) and all of them, like this study, showed positive results for students' learning.

The personal experience of one of the authors of this article during his doctoral work showed that this strategy began to be used at the Université Paris-Est in the program of administration with the goal of bringing students to reflect on their experiences in a changing situation. The use of comics in the French case focuses on the freedom of students to build stories, which they were required to produce before the class discussion of theory. This differs from the implementation of the strategy in this article, which took place after the students had discussed the relevant theoretical material in class. However, it demonstrates that, in other parts of the world, the strategy is beginning to be used in the management area, and it needs to be better disseminated.

It is hoped that this article contributes to the dissemination of the strategy to other programs and institutions and that this encourage professors to use comics in facilitating the learning processes of their students.

AS HISTÓRIAS EM QUADRINHOS COMO ESTRATÉGIA DE ENSINO NA APRENDIZAGEM DE ALUNOS DE ADMINISTRAÇÃO

RESUMO

Objetivo: Este artigo objetiva avaliar a utilização de histórias em quadrinhos (HQs) como estratégia de ensino ativa na aprendizagem de alunos de graduação em Administração.

Originalidade/lacuna/relevância/implicações: A proposta apresentada neste artigo traz uma contribuição teórico-prática para o ensino de Administração, uma vez que descreve as etapas para a utilização da estratégia pelo professor em sala de aula, assim como oportuniza a reflexão de pesquisadores sobre estratégias de ensino inovadoras para a educação em Administração no Brasil.

Principais aspectos metodológicos: O estudo é qualitativo e o método de investigação utilizado seguiu os pressupostos e etapas da pesquisa-ação de Cousin (2009): reconhecimento, planejamento, ação, observação e reflexão, cuja descrição foi adaptada para o contexto do ensino.

Síntese dos principais resultados: Os resultados obtidos indicam que as HQs utilizadas como estratégia de ensino podem potencializar o desenvolvimento de competências, auxiliar no desenvolvimento da inovação e flexibilidade e contribuir para reduzir o *gap* entre teoria e prática. Ademais, desenvolvem o senso crítico, ajudam a estabelecer relações entre eventos e situações gerenciais e incentivam a troca de experiências, auxiliando na tomada de decisão e permitindo aos alunos representarem uma situação profissional fundamentada em preceitos teóricos. Por fim, contribuem para o desenvolvimento da prática reflexiva no ambiente de aprendizagem e, de modo especial, promovem o desenvolvimento da criatividade, algo que foi observado ao longo de toda a aplicação da estratégia.

Principais considerações/conclusões: Espera-se que o estudo contribua para a difusão da estratégia em outros cursos e instituições e que estimule docentes a utilizarem as histórias em quadrinhos nos processos de aprendizagem de seus alunos.

PALAVRAS-CHAVE

Estratégias de ensino. História em quadrinhos. Aprendizagem. Educação em administração. Estratégias de ensino ativas.

EL USO DE CÓMICS COMO ESTRATEGIA DE ENSEÑANZA EN EL APRENDIZAJE DE LOS ESTUDIANTES DE PREGRADO EN ADMINISTRACIÓN

RESUMEN

Objetivo: Este artículo tiene como objetivo evaluar el uso de los Comics como estrategia activa de enseñanza en el aprendizaje de estudiantes de pregrado en Administración.

Originalidad/laguna/relevancia/implicaciones: La propuesta presentada en este artículo trae una contribución teórico-práctica a la educación en

Administração, puesto que describe los pasos para el uso de la estrategia por el profesor en la clase, así como contribuye a la reflexión de los investigadores acerca de las estrategias de enseñanza innovadoras para la educación en administración en Brasil.

Principales aspectos metodológicos: La investigación es cualitativa y el método utilizado siguió los presupuestos y etapas de la investigación-acción de Cousin (2009): reconocimiento, planificación, acción, observación y reflexión, cuya descripción fue adaptada al contexto de la educación.

Síntesis de los principales resultados: Los resultados obtenidos indican que los Cómicos utilizados como estrategia de enseñanza pueden potenciar el desarrollo de competencias, ayudar en el desarrollo de la innovación y la flexibilidad, y ayudar a reducir la brecha entre teoría y práctica. Además, desarrollan un sentido crítico, ayudan a establecer relaciones entre hechos y situaciones gerenciales y fomentan el intercambio de experiencias, para ayudar en el proceso de toma de decisiones y permitiendo que los alumnos representen una situación profesional basada en preceptos teóricos. Por último, contribuye al desarrollo de la práctica reflexiva en el ambiente de aprendizaje y, en particular, promover el desarrollo de la creatividad, algo que se observó a lo largo de la implementación de la estrategia.

Principales consideraciones/conclusiones: Se espera que este estudio contribuya a la difusión de la estrategia en otros cursos e instituciones y motive a los docentes en el uso de los Cómicos en los procesos de aprendizaje de sus estudiantes.

PALABRAS CLAVE

Estrategias de enseñanza. Cómicos. Aprendizaje. Educación en administración. Estrategias activas de enseñanza.

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