How can we help students to improve their creativity? – lessons learned from a case study

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Abstract

One of the main concerns of today’s organizations is to cope with the rapid pace of change while maintaining their competitive advantage. This means that firms must be innovative, create new knowledge and have new ideas constantly. Similarly, one of the main concerns of lecturers is to help students to develop creativity.

According to some authors, new ideas, new thoughts, innovation can arise in an appropriate environment and with the development and train of adequate competences and skills. This means that although some persons were born more creative than others, it is possible to help those less creative to improve their innovative capacities and competences. The question that remains now is “how”. How can we, as lecturers and educators help our students to become more creative?

In this paper we describe a Portuguese case study that took place at ISCAP (School of Accountancy and Administration of Porto – Portugal), in the course of Business Communication, in the unit “Marketing Communication” (3rd year (1st Bologna cycle), 1st semester). We will describe and characterize the situation at the beginning of the semester (situation A), explain the tasks and activities proposed to students and the final result (situation A2). We will discuss differences between situation A and A2, formulate some hypotheses concerning differences and draw some recommendations.

Keywords: creativity, innovation, higher education, communication, case study

1. Introduction

One of the main concerns of the Knowledge Society and today’s organizations is to cope with the rapid pace of change while being competitive. This means that firms must be innovative, create new knowledge and have new ideas constantly. In order to
attain these goals, it is necessary that we leapfrog ahead in our education systems, build a new digital literacy, and improve *soft skills* (creativity, innovation, collaboration, communication, and critical thinking, among others) that could help all 21st century citizens become productive, effective *knowledge workers*. Educators, policymakers, business leaders, parents, and youth must identify and develop new sets of e-skills and e-competencies to help youth succeed, and build a capacity for success toward the 22nd century [Education futures, 2008]. The question that remains now is how we, as lecturers and educators, can help our students to become more creative? Are there strategies, activities and tools helping to increase creative thoughts? In order to contribute for this discussion, we developed a case study that took place at ISCAP (School of Accountancy and Administration of Porto – Portugal), in the course of Business Communication, in the unit “Marketing Communication” (3rd year (1st Bologna cycle), 1st semester). The situation at the beginning of the semester is described and characterized (situation A). Tasks and activities suggested to students as well as the final result are also explained. Differences between the first situation and the second one are discussed. Finally, some recommendations on how to help students to develop competences related to creativity and innovation are drawn.

2. The importance of innovation and creativity for the Knowledge Society

*Innovation* constitutes an important issue for the organization to be competitive today. It is considered as the most important drive for business [Darso, 2008], providing economic value and “social prosperity through benefits to the individual and society” [European Parliament, 2008]. *Innovation* is often coined with *creativity*, which can be described as a

> “process of playing with ideas, thoughts, and possibilities. It is often part of an innovation process, but whereas creativity is inspired activity, innovation is more about the strategic overview in order to create an output that will be used and bought by the customers and clients” [Darso, 2008].

In order to be innovative and creative people has to develop some skills and competences. The European Union sets out 8 key competences: 1) Communication in the mother tongue, which includes the ability to express and interpret concepts, thoughts, feelings, facts and opinions both in oral and written form, 2) Communication in foreign language, 3) Mathematical competence and basic competences in science and technology related to the ability to develop and apply mathematical thinking in order to solve a series of problems in everyday situations, 4) Digital competence which involves the use of information technologies, 5) Learning to learn which means to pursue and persist in learning and organizing one’s own learning, 6) Social and civic competences which comprises working in teams, collaborating, communicating in groups, being able to work in multicultural environments, 7) Sense of initiative and entrepreneurship which refers to the ability to turn ideas into action, including creativity, innovation and risk taking as well as the ability to plan and manage projects in order to achieve objectives and 8) Cultural awareness and expression which includes the awareness of the European cultural heritage [European Council, 2006].
The development of these kind of competences are so important that from the middle of the 1990s, there have been attempts by both employers’ pressure groups as well as in education policy to recognize that ‘soft skills’ are crucial and play a complementary role to qualifications in determining success both at interview and at work. As a matter of fact, during the 90’s and the 00’s, the European Union has stressed the need for people to develop basic skills and key competences as part of their lifelong learning strategies ((cf. European Councils of Stockholm (2001) and Barcelona (2002), Communication from the Commission “Making a European Area of Lifelong Learning a Reality” (2002), Guidelines for Growth and jobs 2005 – 2008 (2005), just to name a few). These competences are so vital and play such an important role that the European Union decided that the year 2009 is the “Creativity and Innovation European Year” [http://create2009.europa.eu/].

Skills related to creativity are important for employers because they allow coping with change. “If we are creative, if we are skilled at innovation, we can come up with new ways of approaching situations that have changed” [Chandler, R. and Grzyb, J.E., 2005: 2]. This means that educational institutions and the education system need to combine the development of specific knowledge and skills together with that of generic capacities linked to creativity (curiosity, intuition, critical and lateral thinking, problem solving, experimentation, risk taking and the ability to learn from failure, use of the imagination and hypothetical reasoning, and a sense of entrepreneurship). In particular, there is a need for skills and competences that enable people to embrace change as an opportunity, to remain receptive to new ideas and to respect and appreciate the values of others [European Council, 2008].

Although some persons may be born more creative than others, it is possible to help those less creative to improve their innovative capacities and competences. According to the “Conclusions of the roundtable of the Ambassadors of the European Year of Creativity and Innovation” (2009), European countries need to “commit to invest in education and in boosting Europe’s skills and creativity as its main policy focus, recognizing that this is more important for the future than concentrating on short-term objectives; Europe’s future depends on its human capital” (Ambassadors … 2009: 2).

This means that educational institutions as well as all educational actors play an important role in this process. They have a social responsibility in preparing professionals able to face all the challenges of a knowledge society. Furthermore, they also have to “promote and motivate the appearance of new ideas and critical thought” [Morales, G.; Morales, C. U., 2007: 1], to develop the capacity of team work, to provide conditions to become adapted to unusual situations, to favor the development of particular abilities and competences in accordance with the personal aptitudes of each one, to promote the interest in professional practice and to favor the increase of the proper rhythm of the student [op. cit.: 1].

3. How to develop creative skills?
Antariksa [2008] refers the existence of some myths that prevent lecturers and students from wishing to develop creative skills. They are: 1) the smarter you are, the more creative you are; 2) the younger are more creative than the old; 3) creativity is reserved for the few – the flamboyant risk takers; 4) creativity is a solitary act and 5) you can't manage creativity. Burken [2007, cited in Ruger, 2008] adds some other myths to this list: 1) Creativity always comes from an epiphany; 2) There is always a clear path to creativity; 3) Creativity is the result of the lone innovator; 4) Creativity always results in greatness; 5) I am not creative; 6) Being creative is a waste of time; 7) Creativity is not for adults or people with serious careers.

For Antariksa [2008], these myths can be overcome with the help of different tools. For instance, he refers that there are tools for defining problems, such as the Kipling method (the use of a set of questions to help to trigger ideas and solve problems), the problem statement (the definition of the problem as well as its context and situation) and the challenge method (usually used to test out ideas, to challenge the problem or situation). This author also refers tools for creating new ideas such as the attribute listing (decomposition of a situation into attributes), brainstorming and visioning (a motivating view of the future; consist of thinking about what one is trying to achieve). Of course these tools will only completely work in an environment where risk taking is acceptable, where people have access to knowledge sources, where innovation is rewarded and where good ideas are supported. Ruger (2008) adds other strategies to overcome the myths. For example, creating an environment for creativity; starting the habit of drawing; creating a personal visual library and a personal metaphor library; taking a creative and visual thinking breaks; practicing creativity; reading more fiction literature and starting a visual thinking school.

Henderson [2008] also refers that the development of creativity can be achieved through several processes, namely:

1. Capturing - preserving new ideas.
2. Challenging - giving ourselves tough problems to solve.
4. Surrounding - associating with interesting and diverse things and people.

This author also says that one powerful way to help students developing creativity is to be a role model for them because children develop these skills not when we tell them but when we show them. One way to model creativity is to show imagination in teaching.

Taking these ideas into consideration, we developed a case study with the aim of helping students to develop competences related to creativity and innovation, which is described in the next sections.

4. Case study

The Business Communication programme of study (diploma) aims providing training in the area of Communication which comprises the study of 3 foreign languages and the use of business communication tools. It has also as general objectives the
development of operational and relational social capabilities that can be applied in different scenarios and environments, including competences of data processing in multimedia support. As for the unit Marketing Communication (the unit in which the case study took place), its objectives are: (1) to provide a holistic perspective of the Marketing Communication, (2) to be aware of the more efficient ways to communicate with the different environments and targets, selecting the most adequate tools taking into consideration the aims of the communication.

The assessment of students is done by 3 complementary elements: 1) the development of a communication plan for a product/service created by a group of students; 2) the development of an e-portfolio (which includes a blog) and 3) all the work done in the classroom or asked to be done outside it, during the semester. The weight of each element is provided in the following table.

<table>
<thead>
<tr>
<th>Communication plan</th>
<th>e-portfolio</th>
<th>Classroom</th>
</tr>
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<tbody>
<tr>
<td>50% of the grade</td>
<td>20% of the grade</td>
<td>30% of the grade</td>
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For the communication plan, students had to create a product or service and plan its promotion following some items/steps previously made available by the teacher. They were also asked to provide 2 draft versions during the semester so the lecturer could comment and give feedback taking in mind the improvement of the plan.

The e-portfolio consisted on a digital platform where the student uploaded all the materials prepared/developed during the semester. The student also had a blog where he/she has been invited to post every week, to comment what he/she had learned, how he/she had learned, difficulties felt, and other aspects that they may feel relevant. The next image is a print screen of the profile of one of the students in the e-portfolio platform.

The work in the classroom consisted of several exercises related to the topics studied. Usually, lectures comprise a short theoretical introduction to the subject using power point presentation (which have been prepared with special care and concern about
innovation and creativity), and a concrete / real situation to solve in group / pair of students. Almost all outputs had to be presented to the classroom and discussed with colleagues. These kind of activities help to promote competences related to oral and written communication, negotiation, workgroup, information research and arguing. Although this kind of situations is not really new for these students, one cannot say that they are totally at easy.

In the next paragraphs we describe the situation at the beginning of the year as well as the activities carried out and the final situation.

4.1. Phase A – beginning of the year

Classes started in September 2008 and lasted till January 2009. At the beginning of the academic year (September), in the first class, students were asked to prepare a presentation of them as persons (and not as students). They could talk about their family, friends, hobbies, likes and dislikes, future plans, etc. They could use any kind of visual aid – movies, films, photos, draws, objects, and so on.

The next photos show some of the moments of their first presentation.

As a complement they had to post an entry in their blogs (e-portfolios) as well as the visual aid used for this exercises. Below, some of the entries are presented.

"It was a good test to prepare a presentation about ourselves in a short period of time. It was a challenge to our creativity and the way we deal with the stress (or as we try to hide it)" (Rita)

"I chose a video and this was not by chance. I consider myself a creative person and I knew that nobody would remember of doing something like that (yes! Because it demands a lot of work). (…) What I most enjoyed was to see the presentations of my colleagues. As a matter of fact I was very surprised because I realized that I didn’t know the persons of my class. It was really interesting to know that I shared some of my passions with other colleagues" (Inês)
After the presentation students were asked to describe what they felt when they had to be in front of the class and talk. Some of them referred that it was not easy to talk in public and that they were nervous (legs and arms shake, the mouth is dry; they are not able to speak clearly). The visual aids some of them used were, let’s say, traditional. The majority of them preferred to use power point slides, with the background white or empty or with a template. Of course there were exceptions. One student prepared a video and some others brought personal objects that helped to visualize the stories they were telling. Nevertheless, the majority tried to stay in a safer environment, avoiding thinking “out of the box” and doing something different.

The situation found is not an unusual one. It is common that students at the beginning of the year, with new lecturers, colleagues and situation, be afraid and nervous when they have to speak in public. The importance of this situation was to identify how nervous they were and how this was manifested in each of them. It was also important that they become aware that all the colleagues were also nervous although some of them could disguise it better. This gave them a little bit more of self confidence.

4.2. Phase B – during the semester

At the beginning of the semester students had to choose one of two events to work with. These events consisted of two rock concerts, with several editions in Portugal. After the introduction to each topic of the programme, students, in group, had to apply the knowledge learned to the event chosen. For instance, after the topic “Advertising”, they had to produce all the advertising material for their concert and they also had to present the output to the class and justify their choices. During the semester they had to prepare 6 presentations. Each presentation was discussed by the class. They had to make critics, say whether they liked it or not and why. It was interesting to see that at the beginning students do not felt at easy to criticize their colleagues. Not even to say if they liked the output or not. They needed to be encouraged to say their opinion. Little by little they started to understand how they could improve their colleagues’ work.

In general, I enjoyed seeing the presentations. Some groups worked more the graphical aspect of it, some others worked more the research of information but all of them showed that they were really committed to the task (Helena)

Our advertisement had too much information (Helena)

Starting the week trying to be critical and evaluate the work of the colleagues… not easy at all! This was seen in the difficulty felt by students in asking questions at the end of the presentations but during the class the questions started to appear, naturally. We understood a little bit the task of the teacher (Maria Luisa)

Students also described and analyzed the dynamic of their workgroup.

As for our group, and replying to the comments of the lecturers, and since our group is constituted only by 2 persons, its dynamic is very good and I believe that our work is better now. Tasks are divided easily and we do not have communication problems. So far, we divided all the tasks, we try to help each other and we work well. In each task done we always learn something and our effort is being reflected in the satisfaction that the lecturer shows when we present our work. I believe that the most important problem in the advertisement
we have done was the overload of information. The analysis of the advertisement was good but we shouldn’t have included so much information. It was redundant. (Claudia)

In parallel, they had to post, every week, in the blog (e-portfolio). There students should describe what they have learned and how this happened. They could also share news, videos or other documents related to the subject and that they find interesting. They also commented classes and the process of teaching:

“I found this class specially interesting; the lecturer talked about very interesting topics namely the characteristics of the sender and the aspects of the message” (Carla)

“In the last class the lecturer decided to make two surprises. The first one consisted in a blue box full of little papers with a word about which with had to talk for 2 minutes. This was really a joke. As we didn’t expect nothing like this, we became a little bit nervous but I believe everything went well and we had a very pleasant class! ☺” (Rita)

“I believe that we learned a lot these weeks. I feel that we have a clearer notion about the marketing plan and what are the ideas to retain. I believe that our practical work helped us to improve our creativity and I have an enormous pleasure doing them. I like to work with my colleague Helena. I feel that we manage to complement each other’s ideas. Good weekend Teacher ☺” (Filipa)

These comments/feedback are also very important for the lecturer since they allow her to adapt the dynamic of the classes.

In these two classes students really participated. The teacher should be congratulated by the images used in her power points. They are really nice and they really motivate us to pay attention! (Maria Luisa)

It is easy, at least for me, to understand the topics through the practical examples asked and referred by the teacher during the class. When we verify the subjects we assimilate better the topic and we are able to apply it to the rock festival in a more objective way (Maria Luisa).

I like the way the lecturer teaches, with the development of projects, applying the theory to the practice which makes easier to understand. The examples provided also help us to associate the topics to our everyday life. (Helena)

During the semester some students had problems in posting. Some of these problems were related to the technology. Some others were related with the methodology, the clearness of the objectives behind the use of this tool and also to the fact that the lecturer didn’t have the opportunity to comment and give feedback to each student individually.

At the beginning of the semester we were asked to post in the platform a reflection each week concerning the class and the projects developed. Generally speaking the suggestion was welcomed by the class. However there were some problems. Some students couldn’t access the space, some others didn’t manage to upload their work – this was my case. (Rita)
As for the platform, I believe it was a positive way to assess students. I believe that through the weekly posts students learned much easier the subject rather than by studying for an examination. Here, we had the opportunity to reflect about everything around this unit and to tell what we were thinking (Mafalda).

I knew that it was not good for me but I decided to give up to post the weekly reflections. Maybe the motive was that I didn’t feel any pressing and I facilitated. Or maybe I do not like to give my personal opinion (Ana Borges).

As for the questions, I believe that the initial reaction about the platform was not really positive because I didn’t understand clearly its utility (maybe my laziness also has some responsibility!). And the idea of repeating the topics learned in the class didn’t attract me, although I understand the advantages of doing it (Ana Borges).

After the presentation of the final project, students were asked to post a last text reflecting about the use of this tool (and platform) as another media of learning and interacting. These are their comments.

The use of this platform allowed me to develop my written competences. It was also an important element to learn the subject throughout the weeks. It has a great value for us, as future communicators, knowing how to write and express ourselves correctly. Furthermore, I believe that this tool was essential to help us to develop our reflection capability. (Rita)

I believe that the idea of the blog was very good because with the weekly posts we were able to make a retrospective, analyzing the strong and weak aspects, remembering all the topics (Adriana)

4.3. Phase C – end of the semester

The last class and presentation took place on the 22nd January. A special event was created for them to present their work. We organized a formal Conference, with a programme, with several sessions and moderators, opened to the public. Students were responsible for all the organization – they had to prepare the auditorium, the video projector, prepare the programme and moderate the session. The choice of the auditorium as the place for presentation was due to the fact that we wanted to introduce a new element able to create some stress in the situation and in the students since they were already used to make presentations in the classroom. We also wanted to simulate a professional situation. There was a healthy competition among groups – each group tried to be more creative and innovative than the others. And this was visible in all the elements of the presentation – the way the students were dressed, the material they prepared to show to the audience, the visual aids and in the performance of the group. Each group really wanted to surprise the audience. This was visible in the title they were asked to include in the programme of the Conference – none of the students wanted to reveal the product chosen. They preferred to choose the word that they felt that could describe their project. E.g., one group chose “surprise”, another group “creativity” and another “innovation”.

The next photos show some of the moments of this event.
Students enjoyed so much this event and were so proud of their work that they invited their parents and friends to participate (see next photos).

4.4. Differences between the beginning and the end of the semester

Some conclusions can be drawn from the activities described above and from the comments received from the students. The most important differences between the beginning and the end of the semester are as follows:

- There is a clear evolution in the quality of the outputs of the activities executed by the students. In the first activities students tried to perform the tasks just if they wanted to “mark” in the agenda. The commitment to the task was not high and the competition among groups was poor. As time went by, the
commitment to the task and the willing to be the better has improved. The quality of the results was also better. Each group wanted to make an impact each time they had to present something. And this is visible not only in the final product but also in the visual aids used, in the coordination of the group and in the way they communicated and presented their work to the class.

- Although not all the students participated in the same way in the e-portfolio with posts, those who participated were encouraged to make reflections and criticism on their work and the work of the colleagues. Some of the students showed an improvement in their comments. They commented the classes, the methodology used by the lecturer. They explained how they learn better and the difficulties felt. They commented the comments of the colleagues and at the end of the semester they commented the used of this platform. It was interesting to see, even for those students that didn’t post regularly, the reflection they made regarding this situation. They tried to understand why they didn’t like to post. This was also very important for the lecturer since it allowed identifying some situations that should be corrected in future classes. The reasons for this were related to the technology and also to the fact that the lecturer didn’t always comment individually the posts of each student. The objective of the e-portfolio also was not very clear for some students.

- There is also a clear improvement in the competences related to communication, in particular in verbal communication. This is related not only with the communication per se (these were students of a communication programme) but also with the pleasure and willingness of being in front of an audience and transmit a message. Students were proud of their abilities and progress. They revealed that they enjoyed a lot making the last presentation. One could feel that they were more confident.

- During the semester several new situations were suggested to the students to solve. They demonstrated capacities to solve them and to apply knowledge to new situations.

5. Conclusion and Recommendations

During the graduation courses the opportunities to develop competences related to creativity and innovation are not usual. Due to lack of time or even lack of knowledge on how to help students to develop those competences, lecturers prefer using traditional methodologies more connected to behaviourism approaches which suggest that we learn from imitation and practice. However, other theories, such as constructivism, suggest that the mind creates meaning through interaction with experiences and symbolic tools. In practice, lecturers try to use a variety of approaches and theories but lack of time and inertia leads them to prefer the first one. And in this particular case, creativity (and innovation) is difficult to be developed or emerge in such traditional environments. Students need to face different situations and problems, they need to discuss and do research, they need to select and structure information, present results and justify their choices. Only in such rich context the required competences are developed.
In the case study presented, lecturer introduced new methodologies more oriented to project work, discussions and workgroup in order to promote the development of competences related to creativity and innovation. Although this methodology was applied in a course of communication, which supposes that students like to communicate and may be more creative than students from other kind of programme, the fact is that students (generally speaking) show some difficulty in expressing themselves in their mother language, are afraid of speaking in public, show less confidence when they work autonomously and have difficulty in working in group.

At the end of the semester students revealed to have improved their soft skills. Nevertheless, the case described above makes us to do some recommendations:

- The combination of different assessment methodologies is important since it allows the lecturer to evaluate the student in his/her individual and collective performance. It is also important for the student since not all of them like to do the same kind of activities. This way they have the opportunity to do individual tasks (e-portfolio) or collective tasks (the resolution of the challenges suggested in the class). They also have the opportunity to express themselves verbally or in the written form.
- The objectives of each assessment component must be clear. Students must understand why they are asked to do the tasks suggested. This is even more important for the e-portfolio since they are not used to post in order to be assessed.
- The e-portfolio technology should be user friendly.
- The comments / feedback of the lecturer to all the posts of the students are very important. They are even more important when the student is not used with this methodology and the objectives are not yet clear.
- The involvement of the family of the student revealed to be also an important issue in the success and commitment of him/her. The possibility of the parents and friends to participate in the last class event made the students feel important and proud. They wanted to show that they were able to prepare a marketing communication plan and present it professionally.

So far the experience has been successful and students acquired relevant professional soft skills. Of course some issues need to be improved for future situations but a general conclusion is that such practices should be repeated and applied in other subjects.

References
Antariksa, Y. (2008). Creative Thinking Skills. URL: 
http://www.slideshare.net/nusantara99/creative-thinking-skills?src=related_normal&rel=572438


Kelsey, R. (2008 ) Visual and Creative Thinking – what we learned from Peter Pan and Willy Wonka. URL: 