Fostering Creativity in Higher Education Institutions: A Consulting Model

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Fostering Creativity in Higher Education Institutions: A Consulting Model

A project in
Creative Studies

by
Mario A. Manzi

Submitted in Partial Fulfillment
of the Requirements
for the Degree of
Master of Science

May 2015
Abstract

This project presents a consulting model to approach higher education institutions for the design, development, and implementation curricula, programs and academic resources about teaching creativity, teaching creatively and creative learning. This project also presents a portfolio of products and services for the consulting model. In spite of the valuable theoretical developments on how to improve education through creativity, there is still a lack of implantation of those theories. There is an opportunity is to bring creativity knowledge and training to higher education institutions through creative educational approaches. This project aims to implement educational and creativity theories into educational environments.

Keywords: Consulting, teaching creativity, teaching creatively, creative learning
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Dates of approval:

_________________  _______________________
                              Project advisor

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                              Candidate
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Fostering Creativity in Higher Education Institutions: A Consulting Model

Introduction

Purpose and description. Much has been said about the relationship between creativity and education and how the former should be taught in all the educational levels. Since J. P. Guilford in 1950 at his presidential address at the American Psychology Association recommended the study of properties of primary creative thinking abilities to improve educational methods and further their utilization, the quantity of research about these topics has increased dramatically. One of the results of this awareness were the new approaches of how to use creativity into classrooms such as the Torrance Incubation Model (TIM), or into public policy like the arguments of Florida (2004) about the link between creativity with economic growth and cultural prosperity, or some studies about how to integrate creativity into the curriculum (Chang, 2014; Donnelly, 2004). Fortunately, this topic has generated numerous notions and methods which can be used by educators, students, and institutions.

In spite of the valuable theoretical developments on how to improve education through creativity in some parts of the world, this progress has taken more time than maybe Guilford would have thought. This is the current situation in Colombia, and in Latin America, where most of the educational models, materials, and resources are taken from other countries. In the best case, they are adapted into to the cultural country context. However, the result of these efforts have not been as expected, as in Colombia’s case.

During the last three decades, Colombia has asked its students to take many international tests to assess the quality of their education, including those known as PISA (Program for International Student Assessment), TIMSS (Trends in International Mathematics and Science Study), PIRLS (Progress in International Reading Literacy Study), and LLECE (Latin American
Laboratory for Assessment of the Quality of Education). In all these tests, Colombia has obtained the last places among the countries evaluated. For the purpose of this document, it is important to focus on the PISA results. This test is developed by the Organization for Economic Co-operation and Development (OECD), and it evaluates the education systems worldwide by testing 15-year-olds in key subjects such as mathematics, financial literacy, and problem solving. In 2012, the Colombian students sadly obtained last place in performance in problem solving among 44 countries (OECD, 2014a).

In order to cope with this problem, the Colombian government through the Ministry of Education decided to change the form of the high school final exam (SaberPro) – equivalent to the SAT College Admission Exam. The new questions would be similar to the PISA. This decision was about how to evaluate the knowledge, but not to teach problem solving in a better and effective way. This is one of the most important reasons that I am motivated to develop this project.

As a professor in Colombia and as a candidate to the Masters in Creative Studies and Change Leadership, I see a huge opportunity in my country and in Latin America. There is an opportunity is to bring Creative Problem Solving knowledge and training, in order not only to help students to improve their problem solving skills, but also to develop creative educational approaches toward teaching and learning any subject.

The main purpose of this project is to develop a consulting model that allows me to offer to higher education institutions in Colombia the design, development, and implementation of curricula, programs and academic resources about teaching creativity and/or teaching any subject in a creative way. It is also the purpose of this project to integrate creativity into a portfolio of products and services for the consultancy.
**Rationale for selection.** The main reason for the selection of this subject is the desire to bring to Colombian society and Latin America an innovative approach to foster creativity and creative problem solving skills in higher education students. I am a professor in the biggest private university in Colombia, so that experience has given me the knowledge to think that our education system has to change if we want to continue developing our country. Because I am not part of the government and my classes are not enough to generate a transformational change, I decided to develop a consultancy model to bring creativity into programs, curricula and classes in order to generate a great effect into the educational system.

Another important reason for this selection is a market opportunity that I see in Colombia. I did a rigorous search on consultancy companies of creativity and innovation with a specific focus on education, but no one has this approach. This space in the market is a great opportunity to offer my products and services to the 133 universities, and to the other 212 higher educational institutions in Colombia (SNIES, 2014).

This project will give me the opportunity to integrate two of my passions: education and creativity. Although in my creative profile I have a high preference for developing, this venture will push me to implement my ideas and my plan. This is really important for me because I used to be afraid to start my own projects, I was always looking for someone else to help me; but since I discovered this opportunity, I want to be the leader in this endeavor.

Before I started this project, I was looking for a foundation that allowed me to spread creativity into my society. I think through consultancy I can reach a wide range of institutions, policy makers and students who are going to be more creative, and spread creativity through their work.
Literature Review

This chapter provides an overview of previous research on the concept of creativity, the relationship between creativity and education, the concepts of teaching creativity and teaching creatively, and consulting in education and creativity.

Understanding creativity. In ancient Greece, Plato defined creativity as the inspiration from the gods through the Muses. This romantic definition gives a clue of how difficult it has been to define what creativity is. The multifaceted and complex nature of creativity has prevented academics from agreeing on a single definition. Psychologists have made an important distinction between product-oriented and process-oriented creativity. On one hand, product-oriented creativity makes the assumption that creativity should be defined as the production of both novel and appropriate work (Sternberg & Lubart, 1999). On the other hand, process-oriented creativity focuses on the cognitive process involving creative potential to generate new ideas, solution of problems, and the self-actualization of individuals (Esquivel, 1995; Fryer, 1996; James, Lederman, & Vagt-Traore, 2004). Using the product-oriented creativity approach, Csikszentmihalyi (1997) defined creativity as:

…any act, idea, or product that changes an existing domain, or that transforms an existing domain into a new one….What counts is whether the novelty he or she produces is accepted for inclusion in the domain (p.28).

The author emphasizes the change that has to be produced by some behavior, idea or product in a specific field, so this change has to incorporate a certain level of novelty to be accepted. For this project, this definition provides two relevant ideas: the novelty of the result, and the domain where creativity takes place. In the same vein, but adding more elements, Amabile (1997) defined creativity as:
…the production of novel, appropriate ideas in any realm of human activity….The ideas must be novel-different from what’s been done before but they can’t be simply bizarre; they must be appropriate to the problem or opportunity presented (p. 40).

Amabile’s definition brings new elements like the usefulness level of the idea or product, and that creativity cannot be only applied to a problem, but also on an opportunity. Plucker, Beghetto, and Dow (2004) presented a process-based definition which is centered on a higher education context. It also integrate the product as a result of the process. The authors defined creativity as "the interaction among aptitude, process, and environment by which an individual or group produces a perceptible product that is both novel and useful as defined within a social context" (p. 90). Because the aim of this project is to address creativity in higher education from an integrative perspective, this definition will be used to identify creativity.

Going back to the idea of the multifaceted and complex nature of creativity, one can see this as an obstacle, but for this project, this is a clear advantage. Davis (1999) recommended that “It’s convenient and conventional to organize creativity around the four P’s”: person, process, product, and press described by Rhodes (1961). In the previous definition of creativity, the interconnected relationship of the four P’s is implicit and relevant. People will perform the cognitive and affective process and will produce a product. Process, is represented by the creative thinking process which refers to how people approach existing problems and come up with solutions (Amabile, 1996, 1998). Product, or in this case, a perceptible product, is something that really exists, that can be observable, and measurable. Press is represented by the social context which is the particular domain where the product will be evaluated and hopefully accepted. This project will refer to this systemic approach during the design of the consultancy model.
Education and creativity. The relationship between education and creativity began to take form when Guildford (1975) started to study giftedness and measurement of creativity, and Torrance (1972, 1981) was interested in creative teaching, and creative thinking in children. According to Smith and Smith (2010, p. 251), the work around these disciplines has focused on three aspects: a) The use of creativity (or insight) to solve problems in other subject areas; b) Creative ideas for teaching; and c) Teaching for or attempting to enhance the creativity of children. For the specific purpose of this project, the focus will be on the use of creativity to solve problems in other subject areas, which can be renamed as teaching creatively, and teaching for creativity which can be renamed as teaching creativity.

The relationship between education and creativity at the tertiary education level can be materialized by the design and use of curricula, courses, classes, workshops, materials, and other resources. In this order, the following subjects will be addressed for their use in the consultancy model: Curriculum and creativity, teaching creativity, and teaching creatively.

Curriculum and creativity. Accordingly to McGoldrick (2002) the term ‘curriculum’ is a program-level concept which represents the totality of the students’ learning experiences for which the educational institution might reasonably be considered to be accountable or responsible. In this direction, Prideaux (2003) presented a framework to understand the principal concepts, components and dynamics around the curriculum design. With the objective to apply these concepts into the consultancy model, these resources will be complemented with the Glossary of Curriculum Terminology published by UNESCO, the International Bureau of Education (2013).

Furthermore, Siegler (2003) recommended that the curriculum design has to be based on the cognitive revolution in adult experimental psychology and on Piaget’s theory within
developmental psychology. This idea means that the emphasis of the curriculum is no longer on the learning, but on thinking. The question then is how to design an effective curriculum that ensures that programs meet specific domain educational needs, and that also foster creativity.

The relationship between curriculum and creativity has reached a significant level being part of public policy in countries such as the US, UK, France, Germany, Sweden and Australia (Feldman & Benjamin, 2006; Craft, 2005; Shaheen, 2010). The literature showed that the recommendations to design a curriculum that includes creativity as a subject or as a method of teaching are very limited. However, there are some useful recommendations to consider. Livingston suggested that “The curricula must be intentionally formed around courses, projects, and seminars in which both collaboration and creativity work in consort” (2010, p.60). Consequently, this work covers these different levels of educational resources.

**Teaching creativity and teaching creatively.** Despite the similarity between these terms, there is a significant difference between them. Jeffrey and Craft (2004) defined teaching creativity “as the identification of young people’s creative abilities, as well as encouraging and providing opportunities for the development of those capacities” (p. 81). The NACCCE report in 1999 differentiated teaching creatively as “using imaginative approaches to make learning more interesting and effective” (p. 89). Even though this distinction is very valuable, for the purpose of this project, the concept of teaching creativity does not only apply to young people; this concept includes any kind of people who attend a tertiary education program.

Lin (2011) presented an educational conceptual framework of creative pedagogy to foster creativity within the students. The model is based on the “background conception and implications of confluence approach in creativity research as well as in pedagogy research” (Lin, 2011, p. 150). This approach gives the necessary strength to model for thinking that the
application will effective results. In the model, “creative pedagogy is put forward to describe practice that enhances creative development through three interrelated elements—creative teaching, teaching for creativity, and creative learning” (Lin, 2011, p. 149). The model is presented in Graph 1.

Graph 1. The three elements of creative pedagogy

Source: Lin, 2011.

**Teaching creativity.** Educating for creativity involves starting from the idea that this subject is not taught directly, but to promote it, to foster it. Fortunately, scholars had proved that creativity is teachable (promote, foster) and could be improved through activities based on creative thinking (Treffinger, 1980). One of the most developed ways to teach how to deliberately use creativity is the Creative Problem Solving method (Parnes & Noller, 1972). But first, it is important to define what problem solving is in its more general form to understand what the Organization for Economic Co-operation and Development (OECD) and the Colombian government want for their students. This concept is defined by the OECD (2014b) as:
…an individual’s capacity to engage in cognitive processing to understand and resolve problem situations where a method of solution is not immediately obvious. It includes the willingness to engage with such situations in order to achieve one’s potential as a constructive and reflective citizen (p. 2).

This definition is what the Colombian government is looking to develop in their students, which is worthy and responsible, if one sees the skills that people need to succeed nowadays. Nevertheless, how to cultivate students’ creativity and problem-solving abilities is a highlight of the effort to reform the contemporary science education (Lee & Erdogan, 2007). The approach that fits better to reach both goals, to solve problems in any subject, and to learn and apply deliberate creativity is the Creative Problem Solving (CPS) method.

The CPS method originally formulated by Osborn (1953), is a process to deliberately use creativity. CPS is a structured process for solving problems or finding opportunities. Each step of the process involves divergent and convergent thinking. One of the most relevant CPS models that better fits the necessity to learn how to deliver and to use creativity to solve a problem is the The FourSight – Expert Model (Miller, Vehar, Firestien, Thurber & Nielsen, 2011, p. 46) model for Creative Problem Solving. This model is based on human’s natural creative processes, and uses cognitive and affective strategies to foster the creative thinking. The result is the generation of creative outcomes to solve a challenge or to take an opportunity. The FourSight – Expert Model will be used in the scenario of teaching creativity.

Teaching creatively. The question that has to be addressed at this point is how to use imaginative approaches to make learning more interesting and effective? This answer can be found in the efforts done to turn creativity into different domains. Gilbert, Prenshaw, and Ivy (1992) were among the first to address the teaching creatively in marketing education. During
their classes, methods such as brainstorming, forced relationships, heuristic ideation, and fantasy were used to teach and to evaluate the content. They measured their methods, and found an increased score in creativity resulting from creative instruction. As a framework to teach creatively two main guidelines will be addressed: (a) To include open-ended activities that have more than one possible answer; (b) to teach the specific tools or methods to think creatively before introducing open-ended tasks.

In order to address these recommendations the Torrance Incubation Model (TIM) which is a teaching and learning creative approach developed by E. Paul Torrance (1979), allows to teach one creativity skill, from an inventory of 18, throughout an entire lesson in an educational environment. This model consists in three parts or stages, which are called “heighten anticipation,” “deepen expectations,” and “extend the learning.” Through these stages the specific skill will be imparted by using activities that also taught the subject’s content. The list of creative thinking skills identified by Torrance and Safter (1999) that are necessary to be more creative are presented in Table 1.

Table 1. TIM skill set

<table>
<thead>
<tr>
<th>Skill</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finding the problem</td>
<td>For recognition or awareness of a situation; definition of the problem and commitment to deal with it; recognizing the essence of the difficulty and identifying sub-problems that are manageable or can be solved.</td>
</tr>
<tr>
<td>Produce and consider many alternatives.</td>
<td>With this skill he person gains fluency; amount; generating many and varied ideas.</td>
</tr>
<tr>
<td>Be flexible</td>
<td>It helps creating variety in content; producing many different categories; changing one’s mental set to doing something differently; perceiving a problem from different perspectives.</td>
</tr>
<tr>
<td>Be original</td>
<td>It helps moving away from the obvious; breaking away from habit-bound thinking; statistically infrequent responses; the ability to create novel, different, or unusual perspectives.</td>
</tr>
</tbody>
</table>
### FOSTERING CREATIVITY IN HIGHER EDUCATION

<table>
<thead>
<tr>
<th>Technique</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highlight the essence</td>
<td>It is about identifying what is most important and absolutely essential;</td>
</tr>
<tr>
<td></td>
<td>discarding erroneous or irrelevant information; refining ideas, abandoning</td>
</tr>
<tr>
<td></td>
<td>unpromising information; allowing a single problem or idea to become</td>
</tr>
<tr>
<td></td>
<td>prominent and synthesizing all of this at the same time.</td>
</tr>
<tr>
<td>Elaborate, but not excessively</td>
<td>It is about adding details or ideas - developing them; filling in details</td>
</tr>
<tr>
<td></td>
<td>for possible implementation.</td>
</tr>
<tr>
<td>Keep open</td>
<td>To avoid premature closure; resisting the tension to complete things in</td>
</tr>
<tr>
<td></td>
<td>the easiest possible way.</td>
</tr>
<tr>
<td>Be aware of emotions</td>
<td>For recognizing verbal and non-verbal cues; responding, trusting, and using</td>
</tr>
<tr>
<td></td>
<td>feelings to better understand people and situations.</td>
</tr>
<tr>
<td>Put ideas into context</td>
<td>To put parts of an experience into a bigger framework; putting experiences</td>
</tr>
<tr>
<td></td>
<td>together in a meaningful way; making connections between things; giving</td>
</tr>
<tr>
<td></td>
<td>situations and ideas a history, and background, a story.</td>
</tr>
<tr>
<td>Combine and synthesize</td>
<td>For making new connections with the elements within our perceptual set;</td>
</tr>
<tr>
<td></td>
<td>combining relatively unrelated elements; hitchhiking; making the familiar</td>
</tr>
<tr>
<td></td>
<td>strange and the strange familiar.</td>
</tr>
<tr>
<td>Visualize richly and colorfully</td>
<td>To use vivid, exciting imagery; creating colorful and exciting images that</td>
</tr>
<tr>
<td></td>
<td>appeal to all five senses.</td>
</tr>
<tr>
<td>Enjoy and use fantasy</td>
<td>To image, play and consider things that are not concrete or do not yet</td>
</tr>
<tr>
<td></td>
<td>exist.</td>
</tr>
<tr>
<td>Make it swing, make it ring</td>
<td>To use kinesthetic and auditory senses; responding to sound and movement</td>
</tr>
<tr>
<td>Look at it another way</td>
<td>Being able to see things from a different visual perspective; being able</td>
</tr>
<tr>
<td></td>
<td>to see things from a different psychological mindset or perspective.</td>
</tr>
<tr>
<td>Visualize the inside</td>
<td>To pay attention to the internal dynamic workings of things; picturing or</td>
</tr>
<tr>
<td></td>
<td>describing the inside of things.</td>
</tr>
<tr>
<td>Breakthrough</td>
<td>To extend the Boundaries – thinking outside the prescribed requirements;</td>
</tr>
<tr>
<td></td>
<td>changing the paradigm within which the problem resides.</td>
</tr>
<tr>
<td>Let the humor flow and use it</td>
<td>For perceiving incongruity; responding to a surprise; recognizing and</td>
</tr>
<tr>
<td></td>
<td>responding to perceptual and conceptual discrepancies.</td>
</tr>
<tr>
<td>Get glimpses of the future</td>
<td>To predict, imagine and explore things that do not yet exist; wonder and</td>
</tr>
<tr>
<td></td>
<td>dream about possibilities; view events as open-ended.</td>
</tr>
</tbody>
</table>

Torrance and Safer, 1999

It is also important to assure that the content of the subject that is going to be taught using a creative way will be also accomplished. For this reason the Bloom’s Revised Taxonomy (Anderson, Krathwohl, Airasian, Cruikshank, Mayer, Pintrich, Raths & Wittrock, 2001) will be used. The categories described in this taxonomy can be thought of as degrees of difficulties.
That means, the first ones must normally be mastered before the next one can take place. The categories are: Remember, Understand, Apply, Analyze, Evaluate and Create.

**Creative learning.** The third element in the model represents the contextual variables that institutions have to ensure to foster creativity in education. These variables are mostly related with the environmental characteristics. Lassig (2012) purposed a series of recommendations or best practices that help to set up the appropriate conditions to trigger students´ imagination and creativity.

- Opportunities for creativity, including teachers providing sufficient time for creative ideation, incubation and production, as well as designing tasks that value creativity;
- A balance between student autonomy (intellectual, task and environmental freedom) and structure (providing a starting point or boundaries to work within);
- High expectations and challenge afforded by intellectual rigor, complexity and higher order thinking, rather than trivial “creative activities” with no depth or authenticity;
- Exposure to diverse stimuli, such as new ideas, people, places, and experiences;
- Allowing students to find a physical environment that supports (or, at least, does not hinder) them to get into the creative “flow”;
- Being a part of network with “creative like minds” who share their level of and passion for creativity;
- Access to experts to model creativity, including industry leaders, mentors, and teachers with real-life experience in a particular field;
- Being open to creative ideas and providing creativity specific feedback, and increasing the breadth and depth of knowledge and skills that students can apply to creative tasks.
Consulting Model

Consulting is a service to which organizations can turn if they feel need for help in solving problems. A consultant is needed when an organizational situation is considered unsatisfactory and able to be improved, and it ends, ideally, in a real change. This definition implies that consultancy has to deal with open-ended problems. These kind of problems are the ones in which creativity has an important role as the appropriate way to approach the problem and then to generate a novel and useful solution for it.

In a consultancy process, creative thinking along with analytical and strategic thinking have to be led by the consultant. The role of the consultant is defined as a problem solver who provides an outside perspective and enhances business capability. Consultants also bring niche skills and a breadth of experience into organizations (MCA, 2015). For instance, the consultant needs a framework that allows defining a problem, offers a new solving perspective, enhances organizational results, and generates a workable solution. This framework should be illustrated step by step, and it should have clear expectations of the interventions and outcomes. This framework also has to be easy to communicate for both the client and the rest of the organization. For this project this framework will be called the consulting model.

The consulting model that I will present here includes four stages and eleven steps that satisfy my necessities and desires. The four stages are Knowing the client, Understanding the opportunity, Designing the solution, and Making it possible. The steps and the content involved were obtained through the research that I made using academic and professional sources. This work is also based on the following theories: The Creative Problem Solving approach, the “action research” approach created by Lewin (1946), the cycle of consultancy by Hilburt-Davis
and Dyer (2003), and in the “ADKAR” model for change management (Proci, 2015). The consulting model with the four general stages is presented in Graph 2, and the model with the specific steps is presented in Graph 3.

Graph 2. Consulting model’s stages
First contact. The first contact between the consultant and the client has to focus on the understanding of the main reason for the contact, and the analysis made by me, as consultant, to see if I can address the problem. According to Hilburt-Davis and Dyer (2003) during this first contact, several questions need to be answered: What is the role of the person calling? How much decision power does the person have? What is the source of the referral? How does this effect how I might work with the client? What types of consulting skills are needed? Is the caller asking for technical advice (information) or process guidance (teaching processes and procedures)? A desired outcome of this contact is to schedule an appointment for the “chemistry meeting”. During the first contact the consultant has to design a mental approach to a general solution and to give some basic ideas to the client, so they can arrange the next meeting. Guidelines for the first contact are in Appendix A.
**Chemistry meeting.** During the chemistry meeting, the client and the consultant have to discuss the issues in more detail. It is important that the decision makers attend this meeting. It is necessary to establish an atmosphere of trust and openness in which the participants do not talk about the issues directly. According to Hilburt-Davis and Dyer (2003) and Miller, Vehar and Firestien (2001) this atmosphere of openness and safety for any kind of meeting with the client are created by (1) establishing ground rules of privacy and confidentiality; (2) defining a code of conduct, the rules of behavior for both parts; and (3) talking about past successful experiences. A second objective is to define who the client is. Even though the client is representing an organization, it has to be clear about the scope of the consultancy. Other important questions to think about are: Do I like the client and the organization? Are they willing to commit resources (time, money, personnel)? Does the client understand about the collaborative nature of the consultation?

At this point of the meeting there are three possible ways to move forward. The first one is when I feel that my services are not a good fit for the problem, so I have to refer the client to a more appropriate consultant. The second is when I think my services fit well to the problem, but the client is not sure about my proposal. In this case I will use a product that I created called the **Creative box** (explained below) with the aim of making the clients more aware of their need and enhancing my proposal. The third possibility is when my client agrees that my services are a good fit, so we can move to the next stage and write the proposal/engagement letter. Guidelines for the chemistry meeting are in Appendix B.

**Creative box.** The purpose of the creative box is to reinforce the message delivered to the client during the previous meetings; likewise, this product will show the potential client that we are a truly creative consultancy firm who practices what it says. The creative box as its name
Fostering Creativity in Higher Education says, will be a box that includes several gifts and messages to awaken the imagination and creativity. For example, a chocolate bar, an anti-stress ball, metal puzzles, etc. And also a brochure with the most important information about our philosophy, expertise and benefits. This creative box will be sent to client correspondence the day following the meeting.

**Letter of engagement.** The purpose of this letter is to define the relationship and nature between the parts. According to Hilburt-Davis and Dyer (2003) the letter should content the following items: (1) An outline of the work to be performed by each of the participants, although this part will be defined precisely during the action plan stage, here it is necessary to communicate the expectations; (2) the expectations the consultant has for the client; (3) the ways that the consultation will benefit the client; (4) the time expected to develop the whole process – the entire process also can be divided into parts; (5) the cost of the consultancy (per hour, per day, per project, retainer, or results based) including the method of payment. Finally (6) the letter should propose who will serve as the liaison (for administrative issues, scheduling, meeting preparations, etc) between the client and the consultant.

Two models of the letter of engagement are presented. The first one is intended to be for large and more complex consultancies, this letter is based on the model presented in the website Foodtrak.com (n.d). While the second one is for short and simpler consultancies and this is based on the model presented in the website Elance.com (n.d). Models of the letters of engagement are in Appendix C and Appendix D.

**Billing.** Hilburt-Davis and Dyer (2003) make some interesting points about the billing that are relevant and useful for me: (1) to choose a method that fits your values, skills, bookkeeping, and comfort level; (2) to be clear with your client exactly what they are paying for and stick to it; (3) to renegotiate around the work, not the fees, if necessary; (4) to remember that
one size does not fit all, so decide in advance what fees you will charge for different size companies, geographic area, and your level of skills and expertise; (5) to choose cases that you want to work with; (6) pro bono work has its own rewards; if you accept the work, be clear about your contributions and why you are agreeing to do the work, for example, the work is challenging, contributes to the community, or eventually, will lead to more work; and (7) when working with a team or other consultants that you have brought in or have brought you in, decide beforehand whether you will bill individually or as a team. Guidelines for the billing are in Appendix E.

**Contract.** After the client has accepted the terms of the letter of engagement, I will develop with my lawyer a contract including the general process that I will carry out, the billing options, the proposal times to carry out the project, and the expected results. I will also consider to include any process modifications due to the assessment stage because this activity could change the focus of the consultancy.

**Assessment.** Assessment is one of the most important stages in my model. For this step, I will put together what I consider the most important stages and tools from other models and consultants´ experiences. The main objectives of the assessment are: (1) to refine the problem or opportunity; and (2) to make information available to design the action steps. In order to reach these objectives this stage has the following six sub-steps. Guidelines for the assessment are in Appendix F.

1. Preliminary diagnosis: With the information collected during the first three steps (First contact, chemistry meeting, and letter of engagement), I will develop a more deep diagnosis. This new diagnosis will include a proposal for the clarification plan. The
clarification plan contains the specific actions and sources to gather more information and to clarify the problem.

2. Feedback for the preliminary diagnosis: The client will have to analyze the preliminary diagnosis, and along with the team, so they can make comments, suggestions and changes about the problem, its causes and for the plan for clarification. With those ideas I will update the diagnosis.

3. Gathering information: Accordingly with Dr. Roger Firestien consultant and professor at the International Center for Studies in Creativity (personal communication, March 19, 2015) the client is the person who better knows the company and the problem, so he/she has to give the information considered appropriate for the consultant. However, depending on the clarification plan, I will gather the information that I think will be relevant including what they also consider important. For this step, I will use the clarification process and questions that are used in Creative Problem Solving (Miller, et al., 2011). At this point, I could also use a survey or interviews if I need more precise data.

4. Analyzing the information: This step will be carry out internally, and accordingly to Dr. Roger Firestien (personal communication, March 19, 2015) in this step the following questions have to be ask: (1) what is the real problem? (2) what is the nature of the problem? This will include time, people involved, supporters, past and future consequences; (3) what has been tried before? And (4) why and how change in this organization has to take place?

5. Assessment results: In this step, I will come up with the insights that will guide the action steps. These results can be presented using the Praise First (POINt) tool which stands for
Pluses, Opportunities, Issues and New thinking of a new idea used in the Creative Problem Solving method, backing up each conclusion or inference with direct and anonymous quotes from the interviews. The results have to be presented in a way that are meaningful to the client. These results will include the following items: (1) the problem or opportunity framed as an issue of organizational-wide importance; (2) the problem framed as a positive question; (3) prioritizing the problems to solve; (4) to present the impact of the consultant’s presence; and finally (5) to identify any special problems, such as ethical, legal, or financial issues that require referral to a specialist.

**Action plan.** The action plan that I will propose will be based on the Action Plan tool used in the Creative Problem Solving method. This tool has to present step by step the actions that I will take as a consultant, and the actions that I will expect that the client or the person/team in charge will do. It is also important to include deadlines for each action and the resources that will be needed. The proposed actions have to avoid old solutions, but instead, propose some that help the client and the team generate their own new ideas. The actions proposed have to be aligned with the products and services that I have (These products and services will be presented in the section called Creative Pedagogy for Higher Education). This action plan has to be analyzed and approved by the client. Guidelines for the action plan is in Appendix G.

**Iterative process for designing solutions.** This stage is the core of the consultancy model. Here is when I, as consultant, work with the people in the organization to come up with the ideas, prototypes and solutions for the problems. I think it is really important to involve the organization in this stage, so the process and its results will be more useful to solve the problem. This stage is where most of the action plan will be developed. Here is where the curricula, or programs, or courses, or classes will be designed and tested. The design process is based on the
Creative Problem Solving method adding a prototyping phase. This last part is really important because the prototypes have to be analyzed and improved using the perspective from the potential users. This process has to be market-oriented. One of the most important and novel actions that I will do during this process is to make a pilot using a real environment to test the solutions with more complex situations. The products and services that I will present and which I have proposed in the action plan step will be used and adapted to the client’s requirements and needs. Guidelines for the action plan is in Appendix H.

Results. The expected results of the iterative process of designing solutions will include the curricula, programs, courses, and/or classes designed; additionally, it will include a strategy for their implementation. According to the professor and consultant from the International Center for Studies in Creativity, Dr. John Cabra (personal communication, March 19, 2015), a successful implementation derived from a consultancy has to be accompanied by a model of change management. This implementation strategy will be based on Proci’s “ADKAR” model for change management (Proci, 2015). The change model that will be the basis for my consultancy model is the ADKAR model of change management (Hiatt, 2006a).

The ADKAR model of change management “reflects the necessary building blocks for individual change and was developed based on analysis of research data from over 900 organizations over a 10-year period” (Hiatt, 2006b, p.1). The model is visualized as a process where a continuous series of events and actions are present, so it serves as a roadmap for the consultant as it is a simplified representation of a complex set of activities that are usually present in all organizational change efforts. The main stages of the model are: (1) Awareness of the need to change; (2) Desire to participate and support the change; (3) Knowledge of how to change (and what the change looks like); (4) Ability to implement the change on a day-to-day
basis; And (5) Reinforcement to keep the change in place. This stage will also cover the 4 P’s (person, process, product, and press) that are relevant in order to succeed in any creative endeavor. The ADKAR model is presented in Graph 4.

Graph 4. The ADKAR model

- **Awareness** of the need to change
- **Desire** to participate and support the change
- **Knowledge** of how to change (and what the change looks like)
- **Ability** to implement the change on a day-to-day basis
- **Reinforcement** to keep the change in place

Source: Adapted from Prosci, 2015.

As part of Proci’s “ADKAR” model for change management (Proci, 2015) it is necessary to present the results, so the people affected by the proposed changes will be open and willing to accept the changes and to work with the new solutions. The results will be presented to the client and to the organization using multimedia resources to make them easier to communicate. Guidelines for the results is in Appendix I.
Implementation. This stage has to be carried out by the organization with guidance of the consultant. Hopefully, the client wants to include the consultant’s intervention during this part. It is important that this relationship continues until those in the organization feel that they can manage the changes by themselves using the ADKAR model. This process has to be done carefully in terms of new changes or new solutions asked by the client. The implementation time is one of the most important stages to assure that the change will be successful, but just enough to gain accountability from employees. Guidelines for the implementation are in Appendix J.

Evaluation. In this stage, I will ask to my client and the people involved in the whole process to evaluate me, my team, the methodology and the results. This action has to be taken just after the implementation. For this step I will use the POINt tool in a survey form. I will also evaluate the results of the process, so I will make further recommendations to my client. Guidelines for the evaluation are in Appendix K.

Follow-up. I believe this part is also one of the most important. Even though I will not be working with the client, I have to transmit that the organization is not alone in its change process, and that we are still there to help. The follow-up calls and/or meetings will be carried out three, six, and twelve months after the evaluation step. Guidelines for the follow-up are in Appendix L.
Finding the Right Solution

Finding the right solution for clients’ problems is a process that takes more than one step starting from the first step in the Consulting Model – *The First Contact* – until the step 7 – *The Iterative Design*. This process consists of assessing which product or service will be more suitable to satisfy the client’s needs. To illustrate how this process occurs a four-step process is presented in Graph 5. The CPS method will be used during these four steps to address each of the questions that each step has.

Graph 5. Assessment process for products and services

**What is the need?** This first step will be carry out in the first two stages of the Consulting Model – Knowing the Client and Understanding the Opportunity. Its main objective is to understand what the relationship between client’s needs and creativity is. Therefore, these three questions have to be addressed:

1. Do they need to teach creativity?
2. Do they need to teach creatively?
3. Do they need to teach creativity and to teach creatively?

**What is the level of intensity that the client requires?** This second step will also be carried out through the first two stages of the Consulting Model – Knowing the Client and Understanding the Opportunity. Since teaching creativity and teaching creatively can be
delivered in different levels of intensity (time or academic credits), the main goal of this step is to figure out what is that level of intensity. Those levels can be measured by the number of hours or academic credits that will be necessary to accomplish the goals. Therefore, depending on the level of intensity required to meet the objectives it will be decided which of the following academic resources is the most appropriate.

- Curriculum. For undergraduate programs 120 credits on average. For graduate programs between 30 and 36 credits.
- Course strand. Between 4 and 15 credits.
- Course. Between 2 and 3 credits.
- Workshop. Between 3 and 8 hours.
- Class. Between 2 and 3 hours.
- Materials. Written material or multimedia.
- Training: Training programs to involve people in the implementation stage.

**Tailor-making.** This third step will happen in the third stage of the Consulting Model – Designing the Solution. The main objectives of this step are: first, to appropriately address specific problems that are unique; and second, to give a differentiation attribute to the final product. Therefore, these three questions have to be addressed:

1. What is the expected outcome?
2. What is the value-added that this proposal will have?
3. Which level of cognitive domain of the Bloom’s Revised Taxonomy does the client want to achieve?
4 P’s. This fourth and final step also takes place in the third stage of the Consulting Model – Designing the Solution. In this step the final solution will come up based on the answers and decisions taken on the last three steps of the Products and Services Assessment Process. Rhodes (1961) defined four separate strands to categorize creativity based on where creativity takes place. These strands are called the 4 P’s: Person, Process, Product and Press (environment). Depending on the outcomes from the last three steps, and the client’s available resources will determine which of the 4 P’s will be used for the final solution.

- Person. During the Designing the Solution stage people who are going to implement that solution must be trained to implement it successfully. Therefore, a training program for whom will deliver the final product will be proposed.
- Process. This component is the entire consulting model. In this order, the process actually means the consultancy itself.
- Product. The product in this context is the solution that will come up after the third stage – Designing the Solution. The product(s) could be one or more of the following educational resources: curricula, course strands, courses, workshops, classes, materials and training.
- Press. The product designed to be implemented has to be supported by an environment that aims to a successful implementation. This component is the Creative Learning part of the Creative Pedagogy model. Therefore, environmental settings and resources to support the implementation of the final product will be proposed.
Creative Pedagogy for Higher Education

In order to ensure that these consulting services provided to higher education institutions will accomplish clients’ goals and expectations, the Creative Pedagogy model proposed by Lin (2011) is the springboard for the products and services that I will offer to my clients. These products are services what will be partly standardized and partly tailor-made. The products and services that I will offer are divided due to their purpose, thereby for teaching creativity the products are categorized by practice and theory; for teaching creatively are categorized by teaching approaches; and for creative learning products are divided in environment and materials. The Consulting model’s products and services are presented in Graph 6.

Graph 6. Consulting model’s products and services
Teaching creativity. This main component of the Creative Pedagogy model (Lin, 2011) will be materialized in this Consulting Model by offering to higher education institutions educational products and services related with creativity in practice and theory of creativity.

Creativity in practice. This product line covers methods and techniques that students need to learn to deliberately use creativity in their personal and professional lives, and also to facilitate creativity process to other people. On one hand, the methods that are part of this product line initially are Creative Problem Solving and Design Thinking. On the other hand, techniques include Mind Mapping, Brainstorming, SCAMPER, POINt, Action Steps, among others.

Theory of creativity. This product covers the theoretical component of creativity for students to know the scientific foundations of this field. Here different perspectives of creativity will be presented, from the psychological foundations and organizational implications of creativity until the current debates on the field.

Teaching creatively. This second main component has different approaches with the objective to deliver a diverse variety of strategies to use within the educational resources. This component is materialized by the use of the Torrance Incubation Model (TIM), Bloom’s Revised Taxonomy, and different creativity techniques and tools.

Torrance Incubation Model (TIM). The utilization of TIM for teaching creatively is key for this component. During the iterative process of design the skills that this model promotes will be chosen depending on the educational resources selected before by the client. Accordingly to Kristen Peterson, Director of the Creative Problem Solving Institute (CPSI), TIM model fits more adequately than other approaches to teach creatively during classes. She stated that TIM
leads a mindset change process during its application because it is a natural and structured process (personal communication, March 19, 2015). In the same direction, the professor Dr. Cindy Burnett from the International Center for Studies in Creativity pointed that TIM allows a higher level of engagement from students because of its huge repertory of skills; however, she recommend to only use one skill per session, otherwise, it could be overwhelming (personal communication, March 16, 2015).

**Bloom’s Revised Taxonomy.** Using this taxonomy gives to the educational resource selected more academic rigor, and it also helps teaching processes to be allying with the subject’s content goals. Specific activities designed to deliver the content will be connected with the thinking skill that the content’s goal requires.

**Creativity techniques and tools.** There is an important amount of techniques and tools that allow teaching any content in a creative way. Initially the techniques and tools that will be used come from the books *Gamestorming* (Gray, Brown, & Macanufo, 2010) and *Thinkertoys* (Michalko, 2010).

**Creative learning.** This third main component of the Creative Pedagogy model (Lin, 2011) will be delivered in this Consulting Model by using three strategies. First, a physical environment that supports creativity; second, an organizational climate that also encourages creativity; and third, designing materials to deliver the information.

**Physical environment.** Building a physical environment (classrooms, tables, electronics and multimedia appliances, decoration, teaching materials etc.) helps to trigger imagination and to foster creativity.
**Creative climate.** Along with the physical environment, it is also important to develop an organizational climate that allows flourishing creative ideas. In order to accomplish this idea, it is necessary to build a creative climate during the application of the ADKAR model.

**Materials.** Designing physical materials that will support the other components of the model. These materials can be physical or multimedia, such as manuals, books, guides, websites, presentations, and so on.
FOSTERING CREATIVITY IN HIGHER EDUCATION

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Appendixes

Appendix A. Guidelines for the first contact.

1. First Contact

Objective
To understand the situation and to analyze if I can address the problem

Questions
• What is the role of the person calling?
• How much decision power does the person have?
• What is the source of the referral?
• How does this effect how I might work with the client?
• What types of consulting skills are needed?
• Is the caller asking for technical advice (information) or process guidance (teaching processes and procedures)?

Outcome
To design a general approach and to give some basic ideas to the client to arrange the chemistry meeting.

Appendix B. Guidelines for the chemistry meeting

2. Chemistry meeting

Requirements
• Attendance of the decision makers
• Do not talk about the issues directly

Objectives
a) Establishing openness and safety
• Ground rules of privacy and confidentiality
• Code of conduct, the rules of behavior
• Talk about past successful experiences

b) Defining who the client is
• Do I like the client and the organization?
• Are they willing to commit?
• Does the client understand about the collaborative nature of the consultation?

Outcomes
a) Services don’t fit = Referral
b) Services fit = Client not sure = Creative Box
c) Services fit = Client agree = proposal
/engagement letter
Appendix C. Standard Engagement Letter – Large

STANDARD ENGAGEMENT LETTER

[Insert name of Client]
[Insert address of Client]

[Date]

Dear [Name of client]

We are pleased to have the opportunity to provide consulting services to your company. This letter is intended to confirm the terms of our representation of services to you. This document covers matters that establish our working relationship, so please read it carefully. Specifically, this Standard Engagement Letter describes the terms upon which [name of my company] will provide professional services to your organization.

As promised, I have set out below a description of the services that [insert name of company/consultor] will provide to you together with a suggested fee proposal. [Insert name of company/consultor] will provide the following services: [Insert description of the services]

Please note that I will not be providing these services: [Insert description of the services that will not be provided]

[Insert name of company/consultor] fee for these services will be as follows: [Insert rates e.g. hourly rates]. [This fee excludes any applicable VAT and disbursements such as fax charges, photocopying etc.]

If required, [Insert name of company/consultor] can also send a note to you every [Insert the time week/month/quarter] which details the actual time spent providing the services to you.

Please acknowledge your receipt of this Letter, and your agreement with the terms and conditions set forth by signing below. Note that this Letter does not obligate you in any way to contract with us for services, instead it simply defines the terms and conditions in the event you chose to engage us at some point in time.

Yours sincerely,

[Name]

Company Name: ________________________________________________________________

By (Printed Name): ______________________________________________________________
Appendix D. Standard letter of engagement – Short

STANDARD ENGAGEMENT LETTER

[Insert name of Client]

[Insert address of Client]

[Date]

Dear [Name of client]

We are pleased to have the opportunity to provide consulting services to your company. This letter is intended to confirm the terms of our representation of services to you. This document covers matters that establish our working relationship, so please read it carefully. Specifically, this Standard Engagement Letter describes the terms upon which [name of my company] will provide professional services to your organization.

As promised, I have set out below a description of the services that [insert name of company/consultor] will provide to you together with a suggested fee proposal. [Insert name of company/consultor] will provide the following services: [Insert description of the services]

Please note that I will not be providing these services: [Insert description of the services that will not be provided]

[Insert name of company/consultor] fee for these services will be as follows: [Insert rates e.g. hourly rates]. [This fee excludes any applicable VAT and disbursements such as fax charges, photocopying etc.]

If required, [Insert name of company/consultor] can also send a note to you every [Insert the time week/month/quarter] which details the actual time spent providing the services to you.

Please acknowledge your receipt of this Letter, and your agreement with the terms and conditions set forth by signing below. Note that this Letter does not obligate you in any way to contract with us for services, instead it simply defines the terms and conditions in the event you chose to engage us at some point in time.

Yours sincerely,

[Name]

Company Name: ________________________________

By (Printed Name): ________________________________
Signature: ________________________________
Title: ___________________________________
Dated: ___________________________________
Appendix E. Guidelines for the letter of engagement – Billing

3. Letter of engagement

Billing

- To choose a method that fits my values, skills, bookkeeping, and comfort level.
- To be clear with my client exactly what they are paying for and stick to it;
- To renegotiate around the work, not the fees, if necessary
- To decide in advance what fees you will charge for different size companies, geographic area, and your level of skills and expertise
- To choose cases that you want to work with;
- Pro bono work has its own rewards (contributions such as challenges, work for the community, or will lead to more work;
- When working with a team or other consultants, decide beforehand whether you will bill individually or as a team.

Appendix F. Guidelines for the assessment

5. Assessment

Objectives
- To refine the problem or opportunity
- To make information available to design the action steps

Steps
5.1 Preliminary diagnosis
5.2 Feedback for the preliminary diagnosis
5.3 Gathering information
5.4 Analyzing the information
5.5 Assessment results
5.1 Preliminary diagnosis

- Diagnosis (First contact, chemistry meeting, and letter of engagement)
- Clarification plan: Actions and sources to gather more information

5.2. Feedback for the preliminary diagnosis

- Client and team: comments, suggestions and changes about the problem, its causes and the plan for clarification.
- Update the diagnosis

5.3. Gathering information

- Clarification process and questions that are used in CPS (red book).
- Optional surveys or interviews

5.4 Analyzing the information

- What is the real problem?
- What is the nature of the problem?
- Will this include time, people involved, supporters, past and future consequences?
- What has been tried before?
- Why and how change in this organization has to take place?

5.5 Assessment results

- Presentation: POINt
- The problem framed as an issue of organizational-wide importance
- The problem framed as a positive question
- To prioritize the problems to solve
- To present the impact of the consultant’s presence;
- To identify any special problems (ethical, legal, or financial issues that require referral to a specialist).
Appendix G. Guidelines for action steps

6. Action plan

Objective
To present step by step the actions that I will take as a consultant, and the actions that I will expect that the client or the person/team in charge will do.

Highlights
- Action plan tool in CPS (red book)
- Deadlines for each action
- Resources for each action
- To avoid old solutions
- To propose ideas to help to generate their own new ideas
- To check our products and services

Appendix H. Guidelines for the iterative process for designing solutions

7. Iterative process for designing solutions

Objectives
- To work together with the organization to come up with the ideas, prototypes and solutions for the problems
- To design and to test the curricula, or programs, or courses, or classes

Highlights
- CPS + Prototyping
- To check our products and services
- Market-oriented
- To pilot the solution in a real environment
Appendix I. Guidelines for results

8. Results

Objective
• To present the outcome from the iterative process of designing solutions (curricula, programs, courses, classes) and the strategy for their implementation

Highlights
• ADKAR model for change management
• 4 P´s (person, process, product, and press)
• Multimedia resources

Appendix J. Guidelines for implementation

9. Implementation

Objective
• To implement the solutions using the ADKAR model.

Highlights
• The presence of the consultant
• Being careful about the time/resources
• Follow the action plan
• Employees´ accountability
Appendix K. Guidelines for evaluation

10. Evaluation

Objective
• The client evaluate me, my team, the methodology and the results.
• To internally evaluate the process and the results.

Highlights
• POINT tool (red book) = survey form
• Recommendations

Appendix L. Guidelines for follow-up

11. Follow-up

Objective
To follow-up the implementation and change process.

Highlights
• It ir out from the contract
• Calls and/or meetings
• Three, six, and twelve months after the evaluation step