Pedagogical Innovation:

Best Practices Through the Perspective of some Major Business Schools Around the World

Flávia Angeli Ghisi Nielsen, João Paulo Bittencourt, William A. Presada, Carolina Costa Cavalcanti, Barbara Maionchi Berardo

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Flávia Angeli Ghisi Nielsen, PhD
Director, Innovation and Education Department
Fundação Dom Cabral - FDC, Brazil
gerencia_educacao@fdc.org.br

João Paulo Bittencourt, PhD
Researcher at the Research Center on "New Pedagogical Architectures"
University of São Paulo - USP, Brazil
jp@b3g.com.br

William A. Presada (Bill), M.S.
Undergraduate Business Administration, International MBA and Social Project Professor at the Fundação Instituto de Administração - FIA – Brazil
bpresada@fia.com.br

Carolina Costa Cavalcanti, PhD
Visiting Professor at Fundação Dom Cabral – FDC
Researcher at USP and Consultant in Pedagogical Innovation, Brazil
carolinacavalcanti.ead@gmail.com

Barbara Maionchi Berardo
Analyst at Sociedade Beneficente Israelita Brasileira Albert Einstein – SBIBAE
Brazil
barmaionchi@gmail.com

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UNICON Research Report:

Pedagogical Innovation: Best Practices through the Perspective of some Major Business Schools in North America, Central America, South America, Europe and Asia.

UNICON sponsored this research initiative conducted by Flávia A. G. Nielsen. The present report intends to promote the discussion on pedagogical innovation, through a broad perspective of the person responsible for the Pedagogy Department (PD) (Executive Director, dean or similar position) of some of the major Business Schools around the world, and inspire others to take advantage of the new challenges of executive education life.

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EXECUTIVE SUMMARY

This report is a reflection on the growing international concerns of Business Schools in guaranteeing quality, innovation and excellence of educational programs and services they provide. In this scenario, pedagogical innovations have become more centralized than ever in a school's strategic agenda.

This research identifies best practices of some of the major Business Schools around the world, sharing their experience and challenges to offer a proactive strategy concerning pedagogy innovation to best enhance the learning experience of its students.

Objectives

Executive education is shifting. To address current management challenges, traditional models fall short in their ability to link knowledge, skills and concepts to the practice of leadership within actual work organizations and environments. In this sense, executive development models have been questioned and it has become clear that they need to undergo some sort of transformation.

For many years, pedagogical innovations that played a secondary role in many Business Schools' strategic agendas have become more important, assuming a bigger part of their main policies to achieve the excellence and maximize educational development value.

The report aims to promote the discussion on pedagogical innovation, through a broader perspective of those responsible for the Pedagogy Department (PD) (Executive Director, or a similar position) of some of the major Business Schools, and inspire others to take action to embrace the challenges of the executive education market.

In order to accomplish that, the objectives of the research project are:

Primary objective:

- *To present and discuss best practices of some major Business Schools around the world concerning pedagogical innovation.*

Secondary objectives:

- *To identify the contributions and value generated by the Pedagogy Department (PD) initiatives.*
- *To analyze what Business Schools are doing, in terms of pedagogical innovation considering the conceptual framework suggested in six (6) listed dimensions: faculty development, learning innovation, learning design, digital culture, executive education mapping trends, and overall participant experience.*

Research Method

Upon reviewing the literature[1], it became apparent that the pedagogical innovation concept was complex to define. As a result, many researchers have suggested the need to design pedagogical innovations in a systemic perspective. Combining the literature with the primary outcome from the phase 1 of the research, we identified some main dimensions that could be used to map the pedagogical innovation in this study. Including in this process the researchers' experience as a data source, the study gained an additional element to complete the picture of the dimensions and its categories under investigation. Based on this, we suggested the 6 dimensions to analyze the "Pedagogical Innovation": a) faculty development; b) learning innovation (innovation in teaching tools, methodologies and techniques); c) learning design; d) digital culture (digital mindset – digital content and technology programs; e) executive mapping education trends; and f) overall participant experience. Some categories were defined to measure each dimension.

In order to understand the different configurations of efforts that Business Schools use to promote pedagogical innovation we adopted, in this study, the term Pedagogy Department (PD) as: the area at the school responsible for acting as a catalyst for either innovation,

[1] The literature review is fully presented in the Appendix D of this report.

development or modernization of executive education, defining learning methodologies and learning strategies for the business school, its faculty and its students.

Primary data were gathered by qualitative research, via interviews, emphasizing the comprehension of the pedagogical innovation in its complexity, valuing the subjective and reflexive dimension of respondents of eleven (11) Business Schools:

- Babson College (USA /North America);
- Cheung Kong Graduate School of Business - CKGSB (China/Asia);
- China Europe International Business School - Ceibs (China/Asia);
- Fundação Dom Cabral – FDC (Brazil/South America);
- IESE (Spain/Europe);
- IMD (Switzerland/Europe);
- INCAE (Costa Rica/Central America);
- Insper (Brazil/South America);
- ITAM (Mexico/North America);
- Kellogg (USA/North America), and
- University of Michigan (USA/North America).

This report shares best practices through the perspective of those responsible for the Pedagogy Department (PD) - Executive Director, dean or similar position.

The project lasted 18 months from March 2018 to November 2019.

Results and Conclusion

The findings revealed that:

- The PD has yet to become a consolidated department in most major Business Schools, and it requires professionals with a senior profile;
- We expected to find more innovative practices in terms of Teaching and Learning than we observed in the investigated cases;

- The two main challenges faced by the PD were innovation and scope along with a great variety of demands that needs to be attended by this department. In some of the investigated Business Schools a certain resistance of the faculty to pedagogical innovation and to the PD was evident. The culture of innovation is still a considerable challenge;
- Few Business Schools investigated evolved much regarding to personalized learning (flexible learning - each participant chooses their learning journey, taking into account individual characteristics and interests), but most of them were focused on stimulating ways to learn and overall group of participants experience.
- There is a lack of clarity about the concept of innovation in Education;
- While some Business Schools are eager for change and attentive to trends (active position), others are in their comfort zone, waiting for their participants to demand changes (passive position).

Concerning the six dimensions of pedagogical innovation, different practices related with faculty development, especially in the area of learning design have favored pedagogical innovation. In addition, it became evident that learning innovation is promoted by the creation of new curricula, products and services and the connection between the Business School and companies (clients) for the continuing exchange of experiences and learning expectations. The use of learning design methods created by the PDs has specific features, which are embedded with unique pedagogical innovation that reflects the school's 'DNA' in the participant learning experience. Furthermore, digital culture is promoted by the production of content for online and blended programs and by training faculty and course managers to use available digital technology. The practices related to mapping trends are centered in doing primary research and studies with current clients, potential clients, non-clients, educators, companies, visionaries and other higher learning institutions, and participating in meetings with disruptors, opinion-makers and visionaries among others. Finally, concerning participant experience the PDs are evaluating the program proposal, mapping if the participant would recommend the program to others and evaluating participant satisfaction of the learning experience at the end of the program. In conclusion, the findings described in this report demonstrate that the initiatives promoted by the PD make a difference and adds value to executive learning experience - new

ideas, new methodologies, new technologies are being used by teachers, instructional designers and project managers. As a result, participants' perception of value increases regarding the educational service received. The findings from this research provide conceptual groundings and empirical evidence of probable directions for continued investigation in executive education pedagogical innovation.

1 INTRODUCTION

The need for educational innovation has become acute. The traditional models for value creation at Business Schools have come under criticism from several sources during recent years. Many of these schools are failing to prepare executives to meet the needs of a modern technologically-driven world and the complexities that they face in a global environment. Thus, Business Schools must be ready to move beyond their comfort zone.

In this sense, pedagogical innovation often arises in response to the pressures faced by Business Schools. For many years, pedagogical innovations played a secondary role in many of these schools' strategic agenda and now it is being highlighted (Lorange & Thomas, 2016). A culture of pedagogical quality and innovation has emerged as a part of the main pillars of a school's strategic policies to achieve its targets of excellence it has established for itself as an educational institution. Business Schools are now increasingly interested in several pedagogical issues of learning – how to promote teaching, learning and educational transformation as a whole. Thus, pedagogical innovation became not just an opportunity, but a necessity.

Larisa Shavinina, when organizing the book, "*The Routledge International Handbook of Innovation Education*" (2013), considered that education innovation is an indispensable concept for educational development, since innovation deals with the implementation of ideas in practice.

Pedagogical innovation integrated into higher education teaching and learning and their effect on student success has been the subject of some studies (Walder, 2014). Research on the effects of pedagogical innovation refer us to the studies of St-Pierre et al. (2006) who inquire as to what characterizes innovative training contexts in higher education and the impact of this innovation on students and teachers.

However, it is important to note that the pedagogical innovation concept is a difficult definition to establish. Research and academic conceptualization have changed over the past few years and many researchers have suggested the need to design a new integrated pedagogy (Cornu, 1995) fostering multiple perspectives. Because there are several distinct notions of its

concept, understanding pedagogical innovation presents formidable challenges but also represents a “black box” that must be opened for new advances to take place.

As society is transformed, Business Schools must, in the same way, change the way they educate if they want to be relevant in the future - new curricula need to be created, new programs designed, new methodology implemented, disruptive technologies and multimedia developed for an engaging learning process, the content of existing courses revamped. The faculty also needs to develop new skills to adapt to this new reality.

We use here the term “Pedagogical Innovation”, contemplating the business executive education context, and it is defined as intentional actions aimed at improving participant learning in a sustainable manner (Walder, 2014). These purposeful actions allow educational environment transformations and optimize the participant learning experience. These transformations are often associated with the search and development of new methods, technologies, tools, programs and other activities that can affect their entire educational system.

In order to structure pedagogical innovation topics for meaningful discussions, we defined a conceptual framework, considering six dimensions by which pedagogical innovation topics can be viewed and discussed, as follows:

a) faculty development;
b) learning innovation (innovation in teaching tools, methodologies and techniques, innovation in educational products/programs/curriculums);
c) learning design;
d) digital culture;
e) executive mapping education trends;
f) overall participant experience.

We used the term of Pedagogy Department (PD) in this study as a catalyst for either innovation, development or modernization of executive education, defining learning methodologies and learning strategies for the business school, its faculty and its students. A PD can include any of the following: a specific area, or department, or other departments, or a

specific person that supports other areas of the Business School to design instructional educational methodologies and activities based on participant necessities and learning objectives. It can also include innovation regarding methodology and different learning processes, such as digital education, case method, reverse learning, faculty development programs, and so on.

This report discusses some of the best practices of 11 major Business Schools around the world, sharing their experience and challenges to offer a proactive strategy concerning pedagogy innovation. Through a broader perspective of those responsible for the Pedagogy Department (PD) (Executive Director or a similar position) of five continents (Asia, Europe, Central America, North America and South America), via qualitative interviews, the study aims to stimulate discussion on pedagogical innovation, inspiring other schools to take action to face the challenges of the executive education market.

The study was divided into two different phases. The first was focused on understanding the Pedagogy Department (or areas that play this role) structure at seven major Business Schools around the world. The second on broaden the understanding of pedagogical innovations of four other schools.

This report shares experiences on pedagogical innovation practices of these 11 major Business Schools, presenting what these schools were doing, the challenges in offering a proactive strategy concerning pedagogy innovation and to best enhance the learning experience.

2 RESEARCH METHODOLOGY

To present and discuss the best practices of some major Business Schools around the world, concerning pedagogy innovation, some cases from different geographical regions were selected. For this, we have made use of the indications provided by Unicon, which included Business Schools that have a PD or a similar department that could be investigated.

Unicon indicated schools that they considered to be more appropriate for the study and which had evolved teaching areas and good teaching initiatives. The intention was to work on specific examples with a different perspective of schools.

Initial contact with the Business Schools was made directly via Unicon members with Deans and/or heads of schools. The research team then scheduled the interviews. Some invited educational institutions declined to participate and claimed that they would be sharing strategic information.

The selection concluded with 11 cases as follows:

- Babson College (USA/North America);
- Cheung Kong Graduate School of Business - CKGSB (China/Asia);
- China Europe International Business School - Ceibs (China/Asia);
- Fundação Dom Cabral – FDC (Brazil/South America);
- IESE Business School (Spain/Europe);
- IMD (Switzerland/Europe);
- INCAE Business School (Costa Rica/Central America);
- INSPER (Brazil/South America);
- ITAM (Mexico/North America);
- Kellogg School of Management (USA/North America); and
- University of Michigan – Ross School of Business (USA/North America).

The project lasted 18 months starting in March 2018 and ending in November 2019. Through a broad perspective of the Executive Director of the Pedagogy Department (PD) (or a similar position) from Asia, Europe, Central America, North America and South America, the study hopes to stimulate the discussion on pedagogy innovation, inspiring other schools to take action to face the future challenges of executive education market.

In order to preserve privacy and confidentiality, the names of the schools won´t be identified and clearly connected with the findings discussed in both phases.

To accomplish the research objectives, the study was divided in two different phases.

2.1 Phase 1

The objective of Phase 1 was to identify the contributions and values generated by the Pedagogy Department (PD) initiatives at seven major Business Schools in different countries (School A, School B, School C, School D, School E, School F, and School G). Data was collected by the group of researchers that interviewed the Executive Directors of the Pedagogy Department via Zoom. All interviews were audio and video recorded.

2.2 Phase 2

Initially, this phase would have taken place after a quantitative data analysis of the 110 Unicon member Business Schools. However, since other Unicon-sponsored research was already being conducted simultaneously with these same schools, and since many of these schools did not have a pedagogical area / pedagogical department, the Unicon members recommended a qualitative study. For this, the group of researchers had to readjust the focus of this phase of the research.

In this sense, for a deeper understanding of pedagogical innovation, four extra relevant cases were included in the research: School H, School I, School J, and School K – in order to analyze what the Business Schools were doing, in terms of transformation of pedagogical innovation, considering the conceptual framework suggested and its six (6) listed dimensions

(Chapter 1): faculty development, learning innovation, learning design, digital culture, executive education mapping trends, and overall participant experience.

3 RESULTS AND DISCUSSION

3.1 Pedagogy Departments (PD): organizational structures that support and encourage pedagogical innovation

Based on the understanding of the complexity of each organization's activities, we sought to identify areas, departments or people that support educational innovation in its different dimensions. This first research phase focused on seven internationally recognized schools and references in their regions and that had agreed to participate in the study.

SCHOOL A

Name of PD: Program Design Team (there are a variety of initiatives to inspire curricular innovation and faculty development).

PD Active for 10 years

PD Structure: Area with seven fulltime employees. Depending on the need, may have part-timers.

PD Activities: Program design and delivery, faculty recruitment, development, continuous improvement, custom program needs assessment, etc.

SCHOOL B

Name of PD: Learning Innovation.

PD Active for 4 years

PD Structure: Area with five people.

PD Activities: Takes care of three lines of actions or areas: Thought Leadership (Conceptual foundation, future of teaching and learning); Solution Development (development of toolkits for action); and, Expertise Building (testing and scaling methodologies and technologies).

SCHOOL C

Name of PD: This initiative is decentralized as each department/area is responsible for pedagogical development.

There is no active PD. Practices of pedagogical innovations exist since 2002.

PD Structure: Decentralized, but led by the dean and the ten senior faculty members.

PD Activities: Teaching methodologies are discussed among the faculty members, looking for the best choice for student's necessities and satisfaction, based on student evaluation and market needs.

SCHOOL D

Name of PD: Center for Teaching and Learning.

PD Active for 10 years

PD Structure: Three people running the operations. 10 mentors on an ad hoc basis.

PD Activities: Faculty development (it holds annual seminars to disseminate teaching methods, assesses faculty, training on active methods, test new technologies – such as virtual classrooms); develops solutions for the market and help to understand the online vs classroom education portfolio. Design and early implementation, testing and tweaking stages of the programs.

SCHOOL E

Name of PD: Innovation and Education Center.

PD Active for 5 years.

PD : 11 people.

PD Activities: It is an area of support for Business Areas (project managers - open enrollment, customized and degree programs) and support for teachers. Education Management is a crosscutting area and ends up being a "pollinator" of good practices "at home". It is a driver of the creation of new methodologies and it is an important agent for knowledge management at School E. The area plays four key roles: Radar, Consultant, Instrumentalizer, Disseminator.

SCHOOL F

Name of PD: Center for Research on Learning and Teaching.

PD Active for 58 years

PD Structure: Approximately 12 people and growing.

PD Activities: Professional Development for Faculty, Graduate Student Instructors (GSIs), and Postdoctoral Scholars, Evaluation and Assessment, promote Diversity and Multiculturalism, use of Theatre on Education, Instructional Technology, Research and Dissemination, Collaborations Across Campus, National Projects on Teaching and Learning.

SCHOOL G

Name of PD: No specific name, but brings together some officials to promote the improvement of teaching and learning.

PD Active for 7 years

PD Structure: 3 people directly involved.

PD Activities: Promoting interaction between different stakeholders, forums for people to formally get together to share materials. The area does the contact with information technology, to make the connection between the methodological needs and the technological possibilities.

In different ways, these institutions work in areas identified here or aligned with the Pedagogy Department concept. However, it must be recognized that each one operates with particular strategies arising from the culture, the context, the need for creation and the value perceived by the stakeholders.

When talking about areas that promote educational innovation in Business Schools, many factors may influence or may even require its creation. Both internal and external aspects, demands from different stakeholders, the presence of strong competitors or even as a way to ensure institutional principles are some of the reasons that make this area relevant today.

The following section explores the foundations and applications of PDs, including their challenges, the reasons why the institutions have created them, the effectiveness, strategies and activities, frameworks on which they are based.

a) Foundations and frameworks

Under various names, or even the absence of an institutional name, these policies and practices are based on a configuration of actions, values and competencies. The manner by which the area is composed highlights not only the values and particularities of each institution, but also a theoretical-empirical framework that guides their work. This framework often emerges from the very demand of internal and external factors. The educational market and its trends ultimately guide the actions: "(…) this is due to the exponential growth of market demand thus the need for trained and experienced faculty to teach our students" (SCHOOL D). Of course, this is not an exclusive issue of this institution, as can be seen in one of the justifications for the work of the SCHOOL Cs PD, which ends up considering both internal and external factors: "Teaching methodologies discussed among the faculty members, looking for the best choice for student necessities and satisfaction, based on student evaluation and market needs".

Among the external factors that drive and demand the work of the area, the external pressure from stakeholders, the costs of higher education and, in some specific places, the competition or economic issues in the region in which they operate", can be recognized. There are several reasons for this: in the US context the costs of higher education has increased, there is pressure from external stakeholders, whether students feel that they are really receiving something different from the university and that the investment they are making here has some value" (SCHOOL F). But a characteristic of the researched institutions is that their main concern is internal or, with issues that involve both internal (mostly) and external factors. "Since its foundation, SCHOOL E has been very focused in its client needs and in creating educational solutions that could really improve or transform business practices. These innovations and methodologies have been put into place in the business areas" (SCHOOL E).

This concern can be explained by the history and reputation of each institution, which seems to force them to rely more on their product and strategies. Even so, a factor not overlooked by PDs is the emergence of online programs and hybrid learning strategies.

> If you think of some of the MBAs that have gone online many of these choices have been motivated by, you know, no alternative. It is sort of, we keep the MBA or shut it down. In hindsight, it was a very nice and brilliant decision and very successful… but if you talked to these people at the time of the decision, they had no choice, so that's how these things strive – they feed of the desperation of some of these schools. That is not our case (SCHOOL B).

Although this is not the case of SCHOOL B, environmental pressure interfere in the way of work, and online courses are the concern of more than one of the schools studied, even influencing the way some of the PDs work. In our interviews, the word 'online' appears more than thirty times, sometimes explaining initiatives, sometimes justifying noninvestment in this area, or exploring possibilities. In some cases, one of the main functions of the PD is to dialogue with areas of innovation or Information Technology:

> "(…) so we don't get lost or left behind. Our undergraduate program does a fair amount of blended learning, and we want to make sure that we have a voice at the table when we need innovations that are specific to our accounts. We have what we call a blended learning manager in our department, and she works very closely with IT" (SCHOOL G).

Among the various initiatives, looking at the internal factors and competencies of each Business School it became clear that PDs have been used to drive competitive advantages by promoting excellence, focus on learning and consumer experience. (SCHOOL A).

In this case the institution does that by "designing enablers and by designing program experiences to avoid derailleurs" (SCHOOL A). The process includes guided application into programs to avoid putting too much content into a course and not assuring that students have time to process what they have learned. "We do this by taking into account cognitive, social, and emotional factors in the design of all of our programs" (SCHOOL A).

We can see in this case that the PD's mission is already oriented towards generating or enhancing excellence in program delivery. This seems to be an important feature for the institution and manifests itself through different characteristics, such as, the concern to provide a design that promotes both good experience and learning, as well as providing a framework for the performance of the PD, based on concepts coming from one or more learning theories. It is remarkable that in this case there is a broad vision that encompasses not only learning, but also the knowledge management of the program concept and delivery. The knowledge

management provided by the PDs is evidenced in several points and was highlighted by more than one institution.

Regarding excellence, it is a part of the mission of one of the researched PDs. “To promote excellence and innovation in teaching in all 19 schools and colleges at the School F” (SCHOOL F), reinforcing the reason for the existence of the area for the university. Excellence and competitiveness, however, come from the composition of different factors, such as scalability, innovation (the word that appears more than a hundred times in this first stage of research), the need to look the future, the creation of new methodologies, customer experience improvement, among other factors that often complement one other.

> Essentially [the PD] is a coordinated mechanism. On one hand for informing our view in terms of teaching and learning and where it is headed as a result of factors and influencers that we all know one being digitization but also the changing nature of work, the discoveries of neuroscience on how we learn and so forth and the evolution of teaching and learning and getting a view on that. And second more obvious point is with that view what the implications are in terms of solutions we have to run and the resources and capabilities we need to scale solutions. (SCHOOL B).

The foundations of PDs in the institutions studied were related to the context in which they were created and are implemented. When it came to faculty development, we are talking about a long-term commitment that grows in breadth and responsibility as time goes by. “I’ve been here for the last 16 years and in the last 10 years there has been great growth in what we do, the different types of programs that we do and the work we do” (SCHOOL F).

In addition, it should be noted that the commitment of Business Schools studied to faculty development is a strategic issue. So much so, that leaders and supporters of this Department are sitting in the chairs of decision makers. Sometimes there is even the dean's direct involvement in the creation or implementation of the PD (SCHOOL B; SCHOOL C).

The participation of senior management represents the support the area receives and the relevance of such actions to the institution. This feature is not trivial, as pedagogical innovation, essential to PDs, requires symbolic, technical and practical support, ranging from approving an appropriate budget, mobilizing key stakeholders and even the physical presence of management at relevant times.

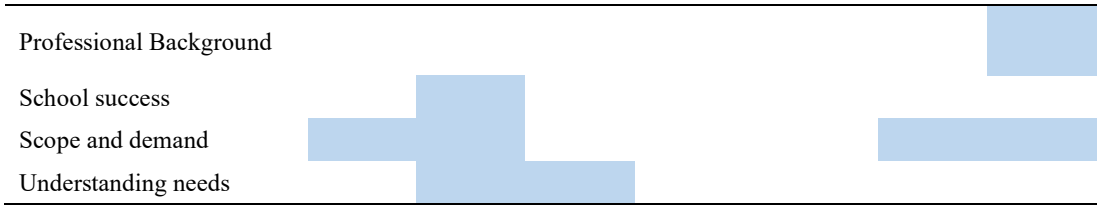
> Another very important goal for us here at the university is for us to think about diversity and inclusion. So, how do we mix spaces for all of our students to succeed and make sure that the instructional climate is good for all of our students? How do we make sure that we are supporting the learning for students from a variety of backgrounds, particularly under-represented backgrounds at the university? Therefore, we kick-off that conversation with the Dean speaking at this meeting because it is important for these messages to come directly from the administration of the school (SCHOOL F).

Thus, we were able to verify through our research the importance of the support of the school directors, which is important for the creation, implementation and consolidation of a PD. A very relevant aspect is the budget allocated to the area. This also constituted one of the many challenges experienced by the PDs. Although some respondents say that "(…) we really have spent a lot of time and resources developing faculty", they argue that executive education in some cases needs to share these resources with other departments or areas "Undergraduate and graduate always take first prize, and we have small resources (SCHOOL G). This resource sharing or scarcity pushes some areas to strive to do their best with restricted resources: "If we were a team, we would be Atlético Madrid (…) you know, trying to do things at the same level of quality with the same speed and agility but with much less resources. That's a constraint for sure" (SCHOOL B).

Although resource allocation was a challenge present in more than one institution, this issue was just one of the challenges raised. Among the other various challenges presented by the institutions, we chose to present a summary of those that the institutions chose as the main ones when asked, on Table 1.

Table 1
Summary of the main challenges reported by PD areas

CHALLENGES	SCHOOLS						
	SCHOOL A	SCHOOL B	SCHOOL C	SCHOOL D	SCHOOL G	SCHOOL F	SCHOOL E
Dissemination							
Innovation							
Justify its existence							
Limited resources							
Market competition							
Portfolio							



Source: Data from the first phase of the research.

These challenges are shared by the institutions in general, but they are more or less intense in those institutions that we highlight. Some of the challenges were mentioned by only one of the institutions and others were often cited, such as challenges related to the scope and demand of the PD area. In general, this is a constant issue even in areas that are already consolidated and with decades of operation (SCHOOL F) and are similar in essence throughout the institutions. Other factors, such as innovation, are challenges to institutions because of different factors, such as cost, relevance of innovation and the uncertainty about what is actually the innovation generated by the area. Table 2 below presents the lines that address the challenges of the PD areas:

Table 2
PD innovation Challenges

Institution	Supporting respondent quotes	
SCHOOL A	*Embracing the virtual world:* I would say the building of capabilities for online learning.	
SCHOOL B	*Creating the new:* But most of the stuff I have to say actually exists already out there. I mean even online programs – they exist and you are not reinventing.	*Partnership:* we need to find partners that are willing to co-experiment with us.
SCHOOL D	*Approach:* Our innovation is based on our own demand. Like what kind of problems might emerge from our teaching practices, from our teaching and learning interactions and there is a problem out that we will have a more pragmatic approach to our innovative approach to solve it.	*Embracing the virtual world:* Virtual classroom is something we tested but it did not fit us.

SCHOOL F	*Time spent:* In my view I think our role is to sort of keep track of where things are going so that we too need to be thinking about what's on the horizon and in what we need to be prepared for. However, there is also a huge demand to just help with what exists now and we've probably spent more time on the what exists now.	*Capacity:* to help someone who is struggling while promoting someone who has some really innovative ideas and helping them kind of making connections and we see ourselves as also connecting people
SCHOOL E	*Balance innovation and cost:* Designing customized projects that meet increasingly specific customer expectations comes at a cost that companies are not always willing to pay, or is over budget. There needs to be a balance between innovation and cost so as not to make the solution unfeasible.	*Balance innovation and cost:* The time of professionals in this area is expensive, and there is always the risk of a project not closing. For this reason, the Innovation and Education Management is no longer highly sought after.

Source: Data from the first phase of the research.

As one can see, the issue of innovation is multifaceted for the PD area of each institution. While some areas are responsible for their school's pedagogical innovation, others work (or intend to work) with internal and external partners. "At the university we have an office called the Center for Academic Innovation which was started only two or three years ago. They are part of the provost's office. We're kind of like cousins" (SCHOOL F).

Questions about what is really new and the digital world leads us to reflect the long way that institutions have yet to go to assimilate the potential and challenges of technology. In this sense, institutions of excellence risk accommodating themselves and not visualizing market pressures for changes.

It appears that smaller or lesser-known institutions are forced to innovate because they are in imminent risk in a highly competitive market. Institutions that are leaders and exponents in the executive education market may not feel threatened by this risk, which may not be true in the mid to long term. "There is a sense of urgency in the schools that are sort of in the middle of the pack. These schools need to change because they are literally going to go out of business if they don't" (SCHOOL B).

In this context, the challenges related to equating innovation and cost, delimiting the scope of the area and being able to properly manage demands are intrinsically related.

Therefore, we sought to understand the particularities of those institutions that pointed to scope and demand as a challenge. These are presented in Table 3:

Table 3
PD scope and demand challenges

Institution	Supporting respondent quotes		
SCHOOL E	*Complexity:* As the complexity of the demands has increased, it is increasingly necessary to design differentiated projects, "out of the box".	*Availability and demand:* The biggest complaint of project managers to this area was precisely the unavailability of the agenda of professionals working there to support some of their projects (the agenda is very competitive with other demands "of the house").	
SCHOOL B	*Clarity of scope of the PD's work by the faculty*: "I do not even think they have clarity on the scope of work. Therefore, that is an area for improvement".		
SCHOOL A	*Team: "*Even with a pretty big team we have more demand for the team's talent".		
SCHOOL F	*Scope: "*So we get asked things that are outside of our mission. We of course have to draw the boundary somewhere or we would be overwhelmed".	*Demand:* "But there's also a huge demand to just help with what exists now and we've probably spent more time on what exists now".	*Demand: "T*he requests that come to us are pushing our staff to their limits just from a capacity standpoint of how much can we can do and how we prioritize".

Source: Data from the first phase of the research.

The PD is a middle area and it does not directly produce revenue. This hinders the PD when it comes to investing, increasing staff or even to exercise its full potential. This challenge ranges from the clarity of the scope of the area, to the way it was conceived.

About activities involving Faculty Development, especially high-quality teachers, there may have been some discomfort from both 'clients' and professionals of PD. This may happen, for instance, when the teacher receives a feedback that highlights the need for improvement and, therefore, a guidance from PD professional is needed. The teacher may not feel comfortable to ask for any help. For the PD professionals it is also challenging, because it is important to find the adequate approach to conduct the situation.

However, positions such as those adopted at SCHOOL A seem to instigate openness and encourage active demand by teachers. This is shown in the PD's own mission, which

includes among other challenges "(…) alleviating burden on full time tenure line faculty on program design and direction, and also of custom program administration" (SCHOOL A). Understanding the needs of PD stakeholders is a challenging factor, as is clarifying their intent and scope. (SCHOOL B; SCHOOL C).

To understand the needs, context and culture of each scenario can be especially relevant for the consolidation of the area. That said, they face a new challenge of working with lean staff and scarce resources:

> The PD team is "lean" to execute so many potential projects: a) the projects demanded by top management; b) those that are thought by the area itself; c) those demanded by the Business Areas. It is relatively common to see projects postponed to the following year due to the lack of "arm" of the team to implement them in the current year (SCHOOL E).

Regarding resources, some schools have directly pointed to this issue as a challenge to the PD, each with its own particularity: "The other issue is limited resources. . . You have to do more, we are kind of like playing in the Champions League with an Europa League budget" (SCHOOL B); "Having a fixed team with many members, considering the senior profile of professionals in the area, is very expensive" (SCHOOL E); "I think we have not made the case to invest much bigger dollars on building some of these assets. So [the challenge of the PD is] money" (SCHOOL G).

Because scope, demand and resources are challenges, some PDs face the added challenge of disseminating the knowledge that their area generates or captures in the market (SCHOOL E), and even justifying their existence. In the latter case, it has to focus on the immediate needs of students, stakeholders directly connected to revenue generation: "it is difficult to justify an independent PD structure and program. For this reason, the challenges are concentrated on student necessities" (SCHOOL C).

PDs are composed of top performers whose competencies range from executive market experience to academic knowledge of business and education. Therefore, finding and retaining professionals with this background can be hard for institutions (SCHOOL E), especially in a scenario where resources are also challenging.

Although the characteristics are different, PDs contribute to the competitiveness and success of their institutions in the market. The perception of market competition as a challenge (SCHOOL E; SCHOOL B; SCHOOL B) may be relevant for the school to increasingly associate PD (which is a middle area) with organizational outcomes. The PD's broad approach to product development can also help contribute to portfolio management: “We are actively testing that market. We try to make sure that on-line testing does not cannibalize into our higher end executive education” (SCHOOL D).

Essentially, the PD is an area that contributes to innovation in an executive education organization. Usually these institutions have a collegiate nature, a context that needs to be understood when it comes to innovation. “It’s a barrier in the sense that the diffusion. . . a lot of the changes happens kind of bottom up in schools rather than top down” (SCHOOL B). And in these scenarios, the PD needs to participate in the stakeholder engagement process, so that faculty participation, for example, is natural and active. “You have to have it bottom up. In a way it is better when it flips and when people get on board, it is more pervasive, it is stronger but it takes more time” (SCHOOL B).

Some of the challenges presented here are typical of a mature PD which experiences the institutional challenges themselves. Growing and consolidating increases the complexity of the PD and may change the nature of its challenges and even its scope. Therefore, the need to understand the objectives and applications of the studied PDs.

Among PD applications to achieve their goals, we have raised 38 concepts in first level coding, which are explored below. Each school explores its PD according to its mission or reason for existence and, there are different levels of maturity of each in its context.

b) PDs Applications

The applications of PDs showed significant variations in both depth and breadth. Elements such as the structure, scope, and concepts that underlie each of these areas seem to culminate in the way they operate and function. Table 4 presents the general activities of each PD, as well as the human resources that put them into practice.

Table 4

PD general activities and human resources

Pedagogy Department	Activities	Number of people working directly
SCHOOL A	Program design and delivery, faculty recruitment, development, continuous improvement, custom program needs assessment, etc.	Area with seven fulltime employees. Depending on the need, may have part-time contract basis
SCHOOL B	Teaching methodologies are discussed among the faculty members, looking for the best choice for student necessities and satisfaction, based on student evaluation and market needs.	Area with five people
SCHOOL C	Teaching methodologies are discussed among the faculty members, looking for the best choice for student necessities and satisfaction, based on student evaluation and market needs.	Decentralized, but led by the dean and the ten senior faculty members.
SCHOOL D	Faculty development (it holds annual seminars to disseminate teaching methods, assesses faculty, training on active methods, test new technologies – virtual classrooms); develops solutions for the market and helps to understand the online vs classroom education portfolio. Design and early implementation, testing and tweaking stages of the programs.	Three people running the operations. 10 mentors on an ad hoc basis.
SCHOOL G	Promoting interaction between different stakeholders, forums for people to formally get together to share materials. The area does the contact with information technology, to make the connection between the methodological needs and the technological possibilities.	3 people directly involved
CHOOL F	Professional Development for Faculty, Graduate Student Instructors (GSIs), and Post Doctoral Scholars, Evaluation and Assessment, promotes Diversity and Multiculturalism, uses Theatre in Education, Instructional Technology, Research and Dissemination, Collaborations Across Campus, National Projects on Teaching and Learning.	Approximately 12 people and growing.
SCHOOL E	Area of support to Business Areas (project managers - open enrollment, customized and degree programs) and teachers. Education Management is a crosscutting area and ends up being a "pollinator" of good practices "at home". It is a driver of the creation of new methodologies and it is an important agent for knowledge management at SCHOOL E. The area plays four key roles: Radar, Consultant, Instrumentalizer, Disseminator.	11 people, but only 4 seniors ones – 1 Director; 3 Project managers; 4 analysts; 1 Scholarship student; 2 assistants (responsible for logistics, classrooms, materials, etc.)

Source: Data from the first phase of the research.

Among the areas interviewed, we were able to map three initiatives that gave us insights to understand a significant part of their activities. Among the schools surveyed in this first phase, we found three initiatives to be described in more detail since they seem to represent, to a greater or lesser extent, different PD models.

That said, Figures Figure 1,

Figure 2 and Figure 3, present below the activities carried out by the PDs of SCHOOL F, SCHOOL B and SCHOOL E, respectively.

Figure 1

Activities performed by the PD (SCHOOL F)

Activities performed by the School F – PD (SCHOOL F)

The Center for Research on Learning and Teaching is part of the University Provost office. It works with graduate students in their instructional capacity and role as teacher assistants, calling them graduate assistant instructors. The center works with faculty, both tenure track and contract faculty within the US context and works with administrators both at the department level and at the school and college level on curricular projects.

The PD works on projects with several schools, but also with the Business School – liaison with the Business School working on some basic initiatives. There is an innovation office which was started recently. This office has been working significantly in the digital space, sort of taking technology as it exists and that is being created at the university and finds ways to scale those to support the development of products and processes.

They are also working in the digital space in terms of using platforms such as Coursera and Edx to offer courses through the university. In order to have an idea of the size of the projects, one considers that the Business School itself has an office renamed the Office of Strategy and Academic Innovation which is in charge of thinking about new initiatives in the Business School with new offerings, new types of degrees and other options.

Almost all the programs that are developed for the Business School are designed for other schools as well, such as the engineering, or science schools. All of that take places at a specific time of the year, with some stretching over the duration of a course. The office runs open workshops and seminars for faculty and graduate students across campus, orientating new graduate students and instructors in August and in December. In August there's about 500 graduate student instructors (GSIs) who participate in that. In December there are about 300 who participants.

It also runs at least four grant programs where money is given for grant competitions for faculty and groups of faculty to support curricular and educational innovation. Thus, it can be seen that even though there is more than one innovation office, the PD also contributes to educational innovation.

In this PD, the collaboration between offices and different colleges is expressive. They run a program for leadership at the university in collaboration the provost office for new department chairs and new associate deans and academic leadership. Consultancy is also carried out to improve teaching practices.

There is another initiative supported by the PD, which is related to inter-professional education in the Health Science School. They are collaborating with the Law School in a major initiative to have law students learn in a very different type of course that has them involved in learning about and trying to solve major problems in various domains.

In summary this PD carries out the activities already mentioned in Table 4: Professional Development for Faculty, Graduate Student Instructors (GSIs), and Post Doctoral Scholars, Evaluation and Assessment, promote Diversity and Multiculturalism, use of Theater in Education, Instructional Technology, Research and Dissemination, Across Campus Collaborations, National Projects on Teaching and Learning.

Source: Data from the first phase of the research.

Figure 2

Activities performed by the PD (SCHOOL B)

Activities performed by the School B PD

This PD is structured along three lines of actions or streams. The first one is called **Thought Leadership** and involves thinking and the expression of that thinking in respect to the future of teaching and learning. They materialize that in the form of papers or short articles, speeches at conferences or even at internal road shows. "And that is the conceptual foundation of what we are doing"(SCHOOL B).

There are two more operational lines of actions: **Solution Development** which is related to the development of the toolkit. "*We have divided the world in terms of methodologies just because it's easier to deal with that way so there is a person related to each methodology. We have coaching and mentoring, we have action learning and experiential learning, we have online learning, we have case discussion and case based learning, simulations and I think that's it*". Each one of them has an agenda, that is how they develop the toolkit, and that agenda varies depending on a number of factors. The third line of action is what they call it **Expertise Building**, which is the development of the expertise to scale these methodologies and promote the faculty development in that direction. However, there is also hardware and software, infrastructure building, etc. An example of that is delivering sessions online under the solution development line, which sits in online learning. "*At some point a few years ago we developed a way of teaching online that we thought was a good one, and so we tested it and experimented with it. Under the other line of Expertise Building we needed to actually acquire the platform at the time, which was Webex. We first did it, then we needed to create a protocol for a faculty in terms of how to teach him or her, how to teach online or design a session online and so forth and so on*". Thus, these 2 lines of action worked in parallel and then eventually became scaled and a lot of times when it happens, the project moves out of the PD. This is the main reason why there are only 5 people. The project may move to Executive Education, or Information Technology or another department.

Source: Data from the first phase of the research.

Figure 3

Activities performed by the PD (SCHOOL E)

Activities performed by the SCHOOL E PD

SCHOOL E is a school focused exclusively on Executive Education. It is not a university and has no degree program, for example. It has the following types of programs: open enrollment, customized and degree programs, MBAs, Post Graduate.

The PD plays 4 central roles:

- Consultant: support managers and teachers in building educational solutions, ensuring internal consistency, quality, adequacy, innovation in accordance with international standards;
- Disseminator: promote the dissemination and internalization of educational processes and methods for application in School E' educational solutions;
- Radar: act as a market radar to promote continuous improvement of tools and methodologies and stimulate innovation at School E (identify trends in educational solutions around the world, in terms of methodologies, technologies, strategies, practices and innovations);
- Instrumentalizer: Encourage and support teachers to adopt technologies and methodologies compatible with the educational model of the course or program.

The main activities developed by the PD professionals can be understood as follows:

- **Educational Technology:** development of digital solutions, development of internal collection (fundamental series, podcasts, cases, opinion videos, interviews etc.) and external (selection of content developer partner), monitoring of digital platform change (Canvas LMS).
- **Innovation:** review of SCHOOL E's innovation processes for educational products/services (Innovation Funnel). Identification of potential external partners for joint development of educational products/services (Edtechs, technology and platform providers, etc.), Innovation Development Expedition/Future Thon (Project with sporadic encounters throughout the year, which involved a "trip"/dive, with various internal and external activities to open horizons, inspire participants to innovate, to have contact with the new, "out of box", etc.).
- **Community of Practice in Education:** creation of Community of Practice in Education – a group of people who engage in a collective learning process to find ways to improve what they do, based on the following pillars: practices in organizations; sharing practices; knowledge sharing; systematization of knowledge and creation of knowledge. The objective was to create a reference center that would stimulate reflection on the future of executive education in Brazil and best market practices, connecting and inspiring participants with ideas and concepts about the possible ways for the transformations of the executive teaching and learning process. The aim was to form a select group of specialists and professionals with extensive experience in executive education: Academics, Practitioners (companies) (directly or indirectly responsible for corporate education in companies - strategic level), Expert Advice, Education Technology Providers, Specialists and SCHOOL E facilitators (CRE managers). The benefits to the participants were:

Find ways to make safer and more consistent decisions about the necessary changes in the educational processes of their organization;

Renew the mindset reflect on beliefs in a decompressed environment;

Suggest topics of common interest for conducting research conducted by SCHOOL E and access to first-hand discussion of results;

Produce knowledge by acting as co-author of materials developed and subsequently published

- **EDUC**: maintenance of EDUC, an SCHOOL E intranet platform with content repository for project managers to access. The contents involve texts and videos talking and explaining new methodologies, examples of reference educational solutions (reference proposals), theoretical foundation of some innovative themes, complementary materials and videos, contacts of suppliers and partners to be

involved in specific projects. EDUC was created to be where project managers would find key news and methodological and content trends (radar).

- **Development of a portfolio management process for SCHOOL E's educational products**: in partnership with Marketing, and with the support of the business areas. There is currently no organized flow at SCHOOL E to manage the portfolio in a systemic manner. Areas (individual programs and custom programs) have their strategies and there may not always be an alignment between them. For this reason, a working group was set up to develop methodology for: a) trend mapping in executive education; b) reflection of SCHOOL E strategies; c) analysis of SCHOOL E's current product portfolio; d) current/future portfolio decisions - maintain, adapt, withdraw or include.
- **Support in the development of the Technical Staff** (in person and online): for this support, the Innovation and Education Management created some support tools/methodologies, such as: Deck design and Group of outstanding experiences. (These methodologies are detailed later in this report).
- **Development of new technologies to support the learning process**: SCHOOL E constantly invests in innovation and recognizes that new technologies can support the learning process. In 2017, inaugurated its Campus Aloysio Faria, in Nova Lima, MG, a TREE Lab.

It is important to note that there is an area - Teacher Management – which is responsible for the entire teacher cycle at SCHOOL E. It is in charge of teacher selection, fee negotiation, hiring, faculty development, selection and monitoring of priority research projects, etc). However, when a teacher begins to point out a problem (Example: students complaining about outdated/traditional methodology, or little use of active methodologies, for example), Teacher Management calls on the PD to support their development. This last management practically does a coaching (individual) work with the teachers that need to improve in some aspect. The PD is the area "radar", responsible for bringing into the SCHOOL E the most innovative methodological and technological practices in the market. Therefore, it is an area focused on new methodologies, which are intended to make a difference in the face of the new technological and complex scenario, supporting project managers - the "business areas" - open enrollment, customized and degree programs, to create differentiated solutions.

At School E, the educational solution is designed as a process and not an event given that learning is ultimately a process with a number of phases including preparation, learning, application, evaluation and continuation which rely on organizational support mechanisms which also contribute to the consolidation of the acquired learning.

Source: Data from the first phase of the research.

The three cases presented denote much abundance and variety in the activities of PDs. Each in its own way and means strives to meet the strategy of the organization. However, the PD may sometimes have a varied structure making its borders difficult to identify. One might ask, for example, how does the School A PD know when it is time to refer the project to another department? Or what are the boundaries between the innovation offices and the performance of the School f PD? Or where are the boundaries between the PD and the Teacher Management of SCHOOL E?

Although this context is not absurd at all since pedagogical innovation is a complex concept, one could question if these areas communicate well with each other or even what risks

are involved. Of course, when it comes to pedagogical innovation in institutions of excellence, better risk than do nothing. Nevertheless, this subject can be further investigated in order to understand the different configurations of each business school.

Among the most outstanding activities in each PD, special attention was given to the use, assimilation, adaptation or creation of teaching and learning methodologies. At this point, the diversity of uses and contextual adaptation were relevant.

Presented below are the methodologies developed or adapted for each context, according to the interviews, in the Table 5:

Table 5

Some of the created or adapted methodologies used by PDs

Pedagogy Department	Methodologies	Some observations
SCHOOL A	Methods to improve learning outcomes, and overall student experiences	Although no example of teaching-learning methodology was offered, the school performs direct observation, participant feedback, client feedback, other stakeholders, external benchmarking (in higher education and beyond)
SCHOOL B	Building Blocks Executive circles Experience in sports Coaching Mentoring Action learning Experiential learning, Online learning, Case discussion Case-based learning Simulations Discussion-based learning	a) Building blocks in the design of programs; b) Executive Circles (which is sort of a twist on these forums that they have, like how to get 6 senior level executives conversing over time about their challenges). c) An experience with the Barcelona Football Club; d) Creating a group of coaches that are available on demand; e) Creating a platform in the LMS that allows the school to deliver coaching.
SCHOOL C	There is no development of teaching methodologies.	N/A
SCHOOL D	Use of online learning	"We use technologies from third parties but we use it in our own context. And just use it in a very pragmatic way".

Pedagogy Department	Methodologies	Some observations
SCHOOL G	Experiential learning Creative exercises	a) Framework of entrepreneurial thought and action. b) "It is a combination of different interactions. It is a 2 or 3 person exercise or work on projects, so it is all different".
SCHOOL F	Team-based learning Game pool teaching Game craft Learning Communities	a) The PD was involved in the implementation of the methodology across the entire pharmacy college curriculum of the university in their Ph.D. program. The PD completely retooled their course to embed team-based learning in their courses. b) For different theories of motivation to give students more choice in the types of assignments and activities that they do in their class; c) The office of academic innovation helped a professor to take an initial idea to become a tool that now is available across the university.
SCHOOL E	Drawing on trends, cutting-edge referrals and in its own vision, SCHOOL E creates educational solutions to address the challenges, problems and demands of both organizations (public and private), and individuals. SCHOOL E is constantly seeking to be at the leading edge of management education, building solutions to help clients meet the emerging future, embracing change, taking advantage of new opportunities and answering new challenges.	Educational solutions are designed taking into consideration different axes a) Results: awareness, alignment, development, transformation - constitute the essence, purpose and origin of each program, formally contracted with the client or aligned with market demands; b) Content: the set of knowledge, state of the art information, training and co-creation - defined in the structuring and conveyed in the delivery of the programs, with a view to achieving the expected results; c) Methodologies: diversity of forms - conventional, relational and experiential - created and/or defined in the structuring and applied in the delivery of the programs, through which knowledge is built, formulated to the reality of the organization, with a view to the expected results; d) Support Mechanisms: Dimensions of engagement at the individual, collective and organizational level - that guarantee the transfer of knowledge and technology, in order to deliver the program expected results.
	Deck design	Deck Design: a methodology developed by SCHOOL E to support the development of innovative educational solutions, based on the principles of agile management (design thinking, lean start up and exponential organizations) and the concept of co-creation, in which internal and external actors are involved in the development of educational solutions.
	Tree Lab	The environment of this lab was designed in partnership with IBM and MRV. It is a multifunctional space that fosters experimentation, creation and innovation by enabling leaders participating in SCHOOL E programs to access cutting-edge technology solutions that enrich the learning process. It connects artisan learning, which occurs during prototyping, with high-end technology.

Source: Data from the first phase of the research.

Not all the methodologies developed and adapted by the institutions are in this table. Nevertheless, some subsidies lead us to reflect on factors that integrate the advantage of each institution. In a context of innovation, augmented reality, machine learning, broadband (5G), we were interested in how institutions innovated, or at least if the PD was included in the innovation strategies of the institution.

Therefore, some institutions recognize the importance of seeking external partners and establishing a relationship in which it is mutually beneficial to collaborate:

> . . . we need to start to explore the partnerships with firms that are more involved in technologies that are sort of in the outer circle, you know the eye, virtual reality. I do not think it is reasonable to expect just sort of a loan as a school to drive innovation using these capabilities. We need to do it but that is generally true of a lot of things but specifically these that are rather complex, require investments, we need to find partners that are willing to co-experiment with us (SCHOOL B).

This is a path taken by School g, which seems to have found some potential partners. It allows them to explore what each one does best in their area:

> So, in a couple instances we have partnered – where we sort of provide our core and we have partnered with a couple of firms that do things very differently, so we are willing to do that and recognize that of late we are not as leading edge as some and I think that's ok (SCHOOL G).

The case of SCHOOL E is also interesting in this sense, as the organization uses partnerships frequently and, from these experiences, began to focus on what is its expertise within the project.

> It is often interesting to partner outside to gain speed or bring a unique "cutting edge" experience to learning. Today, depending on the project, we work with external partners - we have already collaborated with content management companies for the online environment, business game companies, companies specializing in digital platforms, gamification, artists (musicians, fine artists, etc.), etc. We do not outsource the entire project, obviously, but we work together to gain agility and focus on what we are good at doing.

The issue of partnerships widens the horizon, but it does not completely solve the challenge of innovation nor does it end the possibilities of action of the PD in favor of innovation. Moreover, although it is a valid and auspicious strategy, partnerships do not always

result in success. There are risks as with any project, internal or external. “We also tested a virtual classroom put into practice by a partner school and the experience was not too successful, so we abandoned it” (SCHOOL D).

We consider any internal collaboration important, which divides and often influences the scope of the PD in the institution. In some institutions studied, the PD is the innovation agent itself, but not necessarily responsible for Faculty Development. In others, there are one or more innovation offices responsible for relevant elements of pedagogical innovation.

> The Business School itself has an office renamed the Office of Strategy and Academic Innovation led by [the leader of the area] whom I believe is really thinking about new initiatives for the Business School with new offerings, new types of degrees and things like that (SCHOOL F).

The vision of internal partnerships is possible between different offices as well as directly with schools. In a university setting, such as School f, the possibilities are wide. Schools from different areas, PD and other offices can partner, share challenges and maximize earnings.

> There are some faculty out there who have really great ideas and all they need is sort of a partner to think about those ideas and some resources to help them make those happen. Moreover, I want us to have an effect on many, many students too and so how should we spend our time? And how to make sure that we have the capacity to help someone who is struggling while yet promoting someone who has some really innovative ideas and helping them make the right connections? Therefore, we see ourselves as also connecting people (SCHOOL F).

Even when considering the configurational differences of each PD, it is possible to say that it is an important agent to bring - and co-build - the future of the Business Schools studied. Some of the PDs do this to provide the best use of methodologies, innovating in the teaching and learning process.

> . . . it is actually more about looking to the outside or even identifying something that you think is relevant and then bringing it inside the school. By experimenting with it and after the successful experiment, we can create a way or a mechanism so that all the developers of programs can actually add or pick that element as part of their experiment with reasonable chance of success (SCHOOL B).

Pursuing this future, however, is no easy task, as demands are usually high and staff and resources limited, as mentioned before in the section about the challenges of each PD.

> I view our role is to sort of keep track of where things are going so that we too need to be thinking about what's on the horizon and in what we need to be prepared for. However, there is also a huge demand to just help with what exists now, and we have probably spent more time on the what exists now (SCHOOL F).

When it comes to mapping the future, SCHOOL E chose as one of the tasks of its PD to radar the activity of and in the market. For the institution, the PD had to act as a market radar, with a view to promoting the continuous improvement of tools and methodologies and stimulating innovation.

> Therefore, this area was created to focus energy and effort and to operate as a radar, detecting advances in executive education and inspiring the business areas to improve its educational solutions, and promoting the capacity build professors in didactic pedagogical abilities and competencies coherent with SCHOOL E strategic objectives. (SCHOOL E).

In addition to market mapping, the area reports studies and tests in Artificial Intelligence and Adaptive Learning. "This is being developed in order to improve the individualization of learning processes. Support mechanisms to help organizations in creating conditions for implementing the new ideas and practice new behaviors are being discussed and developed" (SCHOOL E).

The concern with the speed of change, whether through innovative learning processes, innovative products or the culture of innovation in a business school, is deeply valid. Executive education naturally demands innovation because it is directly connected with the real world and needs to promote the development of effective skills.

> The curriculums for other courses enforce a certain percentage of course content innovation, something like 20% per annum as a general guideline. For executive education it is very different. They have to be very responsive to the market and I can see that kind of motivation of our faculty members to develop new courses or to get third party solutions or try new methods to meet client needs. Most of the innovation comes from our exec education (SCHOOL D).

This concern and level of action of the PD vary significantly from institution to institution for a number of reasons. Factors such as the context of operation, market pressure, culture and even the scope of PD have an influence. For some PDs, innovation emerges from internal demand. “Our innovation is based on our own demand. Like what kind of problems might emerge from our teaching practices, from our teaching and learning interactions and if there is a problem will we have a more pragmatic approach to our innovative approach to solve it or not” (SCHOOL D).

In the case of School A, there is an externalized concern that the PD group is able and connected with student demands for a new online world. “We needed this group of people to be prepared for a world where on line learning was going to play some role in executive education” (SCHOOL A). For SCHOOL D, internal demands portray market trends: “Again it is very much tied to our future market forecast and future market demand. I think we should apply more technology in the classroom”. Thus, for the PD representative, “students are demanding more and more technology in the classroom. We are trying to phase in some enhanced learning technology. We are not innovation an entire course but just bits in courses” (SCHOOL D).

When it comes to innovation, it can be seen that online courses and the new modalities of offering executive education programs mobilize PDs, as well as areas of technology and innovation. In some schools this question has already been rejected, while in others there are attempting and in a third group this modality seems to be had been assimilated.

> We use digital, presential and blended teaching methods and these vary greatly throughout the campus. The school does have an online international MBA program. There are some programs at the university that kind of use the language of distance learning. Some courses are now offered completely on line, for example the dentistry school has a complete online course. This school is a big place and I think that there is definitely an interest in creating some of school degrees online or partially online (SCHOOL F).

Going beyond internal demands, concerns extend to the School B PD representative.

> Whether schools will exist at all in their current form…I think that level the impact is a question mark. To be cynical we are sort of prolonging our death you if will. I do not know. I do not think anyone knows. I think that’s a whole other kettle of fish. I think it is interesting to think about. What does learning look like as a practice in the world with a life expectancy 120, in the world of six different careers, in the

> world of the kids of our kids? In addition, we need to think of schools as gyms, if you will, where you become a member and supporting this kind of continuous life-long nature of learning as opposed to a series of programs. We can improve on programs make them much more aligned to the theories that we know using the tools of today and I think that impact is very high. Whether we can save our schools from extinction, if extinction will in fact happen (…) (SCHOOL B).

While keeping an eye on the future, schools experience present issues such as the customer experience (SCHOOL A; SCHOOL F). This concern with program participant experience was directly cited in the first part of the interview, with some concerns related to satisfaction (SCHOOL C), proper learning design and overall experience (SCHOOL A). However, we understand that it should be approached more directly in the second part of the research, as one of the elements that make up pedagogical innovation.

In the following, we discuss how the share value of each PD is perceived and measured by the stakeholders of each institution.

c) PD Value

Value creation is one of the elements considered most relevant to the existence of an area that performs the function of Pedagogy Department. It is through its foundations, its application and performance that value is created in multiple dimensions. Therefore, answers questions about the perception of value by faculty and participants in the PD initiatives were analyzed. We also wanted to understand the perception of the leader of the area of PD about the value created by his or her area. Since value is a complex, multidimensional element that varies over time, we also questioned what could be done to maximize educational development value. The following tables (

Table 6,

Table 7,

Table 8,

Table 9, Table 10, Table 11 and Table 12) summarize the data gathered from each institution, according to their supporting respondent quotes.

Table 6

PD value creation at School A

Perception of value by faculty and participants	Perception of value by the PD Leader	How to maximize educational development value
"We know that from informal feedback and systematic feedback so the informal feedback would be when a member from the faculty pulls you aside and says I just did a program with so and so and wow, it was great".	"Indispensable. We have had double-digit topline organic growth in Executive Education since 2012, involving new programs, recruitment and development of additional faculty, and, in general executive education organizational capability and capacity building. This team is integral to those accomplishments".	"I think we are doing it. I think that the focus on the design of learning and taking into account cognitive social and emotional factors is essential and is some of the best things we could be doing for this"
"You can see how faculty has come to trust them more just in the way they behave and in the way they involve them as true partners . . . as part of our annual performance excellence process, we solicit a form of 360 feedback on members of this team"	"I don't see indispensability as intrinsically virtuous. I see it more as we are building an institutional capability and so if the team that becomes obsolete because we've created the capabilities that are needed, so I'm ok with that".	
"In the past, the faculty would have to do all this by themselves, but now they know that there is a team of people talented and capable of helping and creating new programs. They do not have to do it alone. Faculty running executive education programs is not the best use of their time".		

Source: Data from the first phase of the research.

Table 7

PD value creation at School B

Perception of value by faculty and participants	Perception of value by the PD Leader	How to maximize educational development value
"I think it varies. Before even perceiving the value, I do not even think they have clarity on the scope of work. So that's an area for improvement".	"It's wonderful of course! There are two ways to answer that. It is a matter of the time horizon. We can actually use the tools today the opportunities of the tools today to create schools, which are a little bit more aligned with the theories that we know, underpin the best way for people to learn. Therefore, learning that is more personalized, learning that is spread over time, learning that is application oriented".	I think the one thing I would like to do this year is definitely increased communication/training or in any case the awareness what we are doing and the impact.
"I think we are slowly moving a little bit more to the clear and we need to improve on that. Part of that will be through a firmer more explicit link to the faculty department or head of faculty for now."	"So doing a program now over three months is from a quality point of view completely different than 10 years ago. I think that on that level the impact can be very or is very high. I think a whole different question is what the institutions are going to look like tomorrow".	"We did what we call these **academic smarties**, which are 30-minute demos online by a colleague. We created what is called learning up which is sort of an online blog where solutions are posted and news about the industry is posted. Adding to this mix would be nice. Increasing essentially curiosity".
"So we need to be as good in those different contexts and methodologies as we are with the context of classroom and the case study methodology. If not you can't give confidence for faculty members putting together the program"		"I think the other thing is we need to start to explore is partnerships with firms that are more involved in technologies that are sort of in the outer circle, you know the eye, virtual reality".

Source: Data from the first phase of the research.

Table 8

PD value creation at School C

Perception of value by faculty and participants	Perception of value by the PD Leader	How to maximize educational development value
"Yes, and we measure this by the student's evaluations".	"It is necessary and needed to maintain student satisfaction and course quality".	"For our structure and present needs, we are comfortable with our development, quality, and growth.

Source: Data from the first phase of the research.

Table 9

PD value creation at School D

Perception of value by faculty and participants	Perception of value by the PD Leader	How to maximize educational development value
"When there is an issue or a problem to solve we are always there, and we help gather resources either in-house or from third parties".	"My perception is that I have the highest opinion of the executive education. It is because it is innovative. It is real world"	"It is very much tied to our future market forecast and future market demand. I think we should apply more technology in the classroom. I have been here for 10 years and I can see that students are demanding more and more technology in the classroom".
"We are more or less the helper there to help our faculty members to solve the problems that our faculty may have. They appreciate this kind of help".	"The curriculums for other course enforce a certain percentage of course content innovation like 20% per annum as a general guideline. For executive education, it is very different. They have to be very responsive to the market"	

Source: Data from the first phase of the research.

Table 10

PD value creation at School G

Perception of value by faculty and participants	Perception of value by the PD Leader	How to maximize educational development value
"Participants are surprised by us. They come thinking of what it was like getting their MBA or when they were in school, and then they come, and they realize that it is different".	"Well the values we have I think we've been proactive. I feel that we have not pushed ourselves lately. Because what I've seen out there and we haven't pushed ourselves outside of our comfort zone"	"Because our graduate program does a fair amount of blended learning, and we want to make sure that we have a voice at the table."

"We provide a set of programs for these former football players who may ask 'do I want to go into business or I'm starting a business'? And so when we see them – think about these former football players most of whom, and they are not like soccer players, they have more education than most athletes, professional athletes"	"We are probably early in terms of the experiential learning and doing some innovative things and I will tell you right now what I see out there now is some really, really cool stuff and we have become accommodated".	"We need innovations that are specific for our accounts, so we call a blended learning manager and she sits in our department, but she works very closely with the ATIs. We have had someone in that role for maybe 6 or 7 years."

Perception of value by faculty and participants	Perception of value by the PD Leader	How to maximize educational development value
"We put them to break out. They have to present and they are entertainers. They are performers. Moreover, they realize and we give them simple things that they can be successful rather than sitting in the classroom being lectured at. Therefore, the answer is that they are pleasantly surprised that we apply adult learning theory and that it is much more interactive".	"You know, faculty is flexible, they like to try new things, and some are with IA and robot stuff way outside the classroom stuff. And they are creative. Actually the answer is some are willing and some are not. . . They are not all on board but we have a lot of faculty that like to try new things. Quite honestly our in-company course clients are more risk averse than our faculty"	
	"The motivation for a pedagogical department and the fact that we are a small school is – well I'm not going to say that we spend tons of money on this but it is important to us. And people are being rewarded and recognized and are gratified by good teaching. So the college invests in it but we are just a business school".	

Source: Data from the first phase of the research.

Table 11

PD value creation at School F

Perception of value by faculty and participants	Perception of value by the PD Leader	How to maximize educational development value
"At some level the fact that we have our campus partners in many cases are willing to cost-share with us, enables us to have a staff larger than if they didn't. The Business School has in-company customized classes but I am not directly involved with that".	"The goal here is very much that there is not just a single innovator but to try to see it as something that is sustainable over time. It is an experiment. Especially in our context the idea of faculty autonomy"	"We definitely have the challenge at the moment that the requests that come to us are pushing our staff to their limits just form a capacity standpoint of how much can we can do and how do we prioritize".

“We have had a collaboration with the Ministry of Education in China as Chinese universities have been developing teaching centers in China and so there are quite a few Chinese universities that have sent delegations to us over the years for a course on running teaching centers and we have been connected with teaching centers in China. That is actually another thing that we do and there is a whole history connected to that initiative”.		

Source: Data from the first phase of the research.

Table 12

PD value creation at School E

Perception of value by faculty and participants	Perception of value by the PD Leader	How to maximize educational development value
“The perception is that the initiatives promoted by the PD area make a difference and add value to projects - new ideas, new methodologies, new technologies are being used by teachers, and as a result, participants' perception of value about the service is increased. The perception is the same for faculty and participants, and I would extend it to project managers”	“In my view, the pursuit of excellence must be a habit, not an act. In this sense, having an area dedicated to educational innovation (and not just pedagogical) has been fundamental for the continuous innovation of education at SCHOOL E, for the strengthening of its identity and for the reinforcement of its competitive differential”.	Having an external team, which can be deployed whenever possible, could help gain agility. This is already being done by some business areas - hiring hours of outside professionals and consultants to support and accelerate some projects - but in an unordered way (each considering their specific demand).
"From the teachers' point of view (and expanding to project managers), this area at SCHOOL E still needs to gain speed and agility to be able to meet internal demands satisfactorily."	“The PD supports the Teachers Management in the development of the teaching staff, based on working with active methodologies and technology support to transform the teaching and learning processes, but its role transcends the pedagogical issues”.	“Some studies and tests in Artificial Intelligence and Adaptive Learning are being developed in order to improve the individualization of learning processes. Support mechanisms to help organizations in creating conditions for implementing the new ideas and practice the new behaviors are been discussed and developed”.
	“The area is responsible for the innovation of educational products and services, for supporting reflection on the institution's portfolio, for bringing into the SCHOOL E the best business partners, such as business game providers, online content producing companies, multi-professionals to contribute to innovative methodologies,	

	continuously enabling the transformation of SCHOOL E's executive education".
	Having an Innovation and Education Management (name of the PD) within an institution focused on Executive Education is critical. Without it, an institution can hardly provide the differentiation needed to stand out in the increasingly demanding marketplace for unique and innovative education programs".
	"The value of the Education and Innovation Management at SCHOOL E is due to its ability to innovate education and transform linear teaching into transdisciplinary proposals. And the professionals involved in this area are committed to this transformative education".

Source: Data from the first phase of the research.

From the value scenario in each institution, we can see some patterns in terms of PD value for the institution. At first, the issue of the area's scope challenge in its different contexts was observed. If the faculty and other participants are unclear about the roles played by the PD, there is hardly a consensus about the value it generates.

Despite this fact, there is evidence of improvement in school programs and ways of acting, of student satisfaction assessment, and it is believed that the very quality of service provided by institutions (as evidenced by rankings, and various stakeholders) has the influence of the PD. This optimism was already expected, once we talked to the area managers, but there is also awareness about the fallibility of the PD, its scope and demand challenges, and the need for continuity of work to generate value for stakeholders.

We have in mind the challenges of each of the PDs studied in this research and, more importantly, in those areas that are in everyday Business Schools, struggling to differentiate

their teaching and learning process as well as their products. It is also expected that these areas help institutions to promote pedagogical innovation.

Experiences worth sharing

Some projects are worth mentioning here. We chose four cases presented by PD managers, sharing some of their projects regarding pedagogical innovation.

Innovation and Education Center – SCHOOL E

Leading the implementation of the innovation

"In 2016, the PD of the School E received the responsibility of leading the implementation of the innovation management process. This included supporting the design and delivery of all educational solutions through the promotion of innovation and also to provide guidance on the appropriate use of educational methodologies, strategies and communication technologies. One of the actions was the creation of an event – "Futurethon", that brought together leading professionals in the areas of Education, Technology, Communication, Consulting, and the Humanities and Arts. The objective was to jointly build what has been named the "Next Generation Education", comprised of the trends that are now being used to help guide the direction of innovations at School E: a) Promote the Maker Culture - learning by doing through experiential methodologies: active methodologies, problem-based learning, projects, action learning, etc.; b) Consider the student/participant at the center of everything: customization of the learning paths and the student/participant as the protagonist of this path; c) Create the space of discomfort: remove the students/participants from their comfort zone; d) Promote experimentation: new organizational contexts and architectures.

In partnership with the Innovation and Entrepreneurship Center of the School E, the PD built an innovation model, called "Funnel of Innovation". Around 50 employees from various areas were involved in the process of building this model, at different times and roles. The Funnel involved 4 stages: 1. Insights (market radar); 2. Ideation workshop; 3. Development of prototypes and 4. Selection of prototypes. One concern was to define the criteria to guide the choice of ideas and metrics to measure the projects' results. School E's senior managers were involved in choosing the best projects, considering the priority of the strategic initiatives".

PD Learning Innovation – SCHOOL B

A toolkit to innovate pedagogically

"We have tried to develop this toolkit, which consists of all these different solutions in these different methodologies and over time. Now we are seeing or starting to see the kind of maturity and have applied this toolkit to the design of programs, or what we call 'learning experience'. So what that means is sitting down with the owner of that program (Who could be a program director, but specifically the faculty director as well, so the two of them) with a sort of design thinking inspired methodology redesigning that experience and program starting from the goals and how those goals are identified, expressed from knowledge to capabilities etc.

We have been thinking about what interactions are best suited to achieve our goals and those interactions then become one or more methodologies. When you look at that experience, which used to be three days of predominantly case-based in classroom. Then, you start from a white sheet of paper and think agnostically it becomes more complete. Now it can be consolidated with assessments, knowledge transfer and application of a different kind and different things. It just kind of becomes a well-designed blended experience which is nothing new but doing that is a first step and then doing that on scale meaning all of our programs using that program is the next step.

We have a few examples of programs that are like that now. The most recent, the program we call Leadership Development in New York. It is a mid-level program. It is high potential for general management in nature and it used to be the classic three weeks, but now it is six months: one month online and a day and a half in class.

That is very superficial if you look at it that way, but is first sense of the change happening there with a certain process. Then we have other projects, which are little more visible as if we built a virtual classroom along the lines of what Harvard did but is a lot cheaper and easier to implant. However, these are part of the toolkit. The nicer thing is when you actually redesign the learning experience completely".

PD Area - SCHOOL G

Partnerships and focus on what you do best

"We have a recent project where the client actually challenged us to do this. It was a project that could not be done alone – we have to work with partners. Therefore, the organization came to us – they spun off from a large publishing company and went in with private equity. They said: 'we have to change the culture, we have been charged with creating digital learning and we want to be the learning science company'. They were making way but not so much, so they came to us. They were pretty creative and innovative and said: 'let's change the culture'. They indicated a third company which worked with leadership development. So, they told us that we had to work with them and stated: 'we know you're known for teaching innovation and entrepreneurship. Can you do this? And by the way, these folks need some coaching'.

There were 4 partners in the program – there was an assessment firm, because we decided that we were not going to do the coaching – we brought in a partner for that. We had this cool company called the Leader's Quest to work with this journey and then we had the more traditional classroom teacher. However, we taught sort of entrepreneurial thinking, the environment with a business case.

The interesting is that is really fun to get into the room with very different approaches in creating a program. Moreover, I do think in executive education with these partnerships in which organizations are not looking for one person to do it all. They are looking for what you do best in class and do it. So, you get a part of the project.

I was pretty proud of our faculty in partnering like the Leader's Quest it's really experiential, it's really out there and it was really – my one faculty director said 'these folks are nuts, I can't believe this'. Therefore, I sent him down the journey because he had to experience it. When he came back to School G, he said: 'Oh boy, they're good. They've raised the bar. We got to really show up'. However, he spent the time; we invested the time and learned how they did it. I think that's pulling together the best of to create a meaningful learning. Experience and doing it well with people who really want to do it well together. And I'm really proud of that."

Center for Research on Learning and Teaching School F

Role play to facilitate discussion of complex topics

"We have a theater program that is part of our center. This theater program is an amazing tool for generating conversations about both classroom climate and institutional climate issues at the university. In fact, an incredible tool has opened up the possibility to have conversations in spaces that would otherwise be very difficult.

We have a tenure sketch that the college requires everyone serving on the tenure committee to participate in – conversations with the dean where the sketch is performed and using it to sort to further the college's mission. That is very unusual and it has been an important tool.

This is not a business program, this is a program we have done for our largest college and it is a faculty learning community that brings together faculty applied that have participated in it.

We run it over the course of the winter term and it's called the large course initiative – not a very fancy name – but faculty, and we do it in fairly small groups of 10 or 12 and the biggest we ever had was 18. Over the course of 4 weeks there are 4 sessions of 2 hours. We examine the science of learning a little bit and what we know about it and how it applies to big courses"

The projects mentioned by the PD managers illustrate the diversity of practices that the area performs. All data from this step demonstrated that PDs can be defined and understood in different ways, as well as composed of various configurations. The results raise discussions about the scope, demand, objectives and applications of this area. In the next section, we present the results of the second stage of the research, which attributed magnitude to each of the elements of pedagogical innovation in four different Business Schools.

3.2 Pedagogical innovation framework

In this second phase of the study the main objective was to present and discuss best practices of some major Business Schools, concerning pedagogy innovation considering the six (6) listed dimensions: faculty development, learning innovation, learning design, digital culture, executive education mapping trends, and overall participant experience. Some relevant cases were studied in this Phase 2: School H, School I, School J and School K.

3.2.1 Executive Business Schools and its Pedagogical Departments

The schools that participated in this phase of the study contexts similar to those already studied, and all seem to be aware of the importance of pedagogical innovation. Below we present the schools, their Pedagogy Department context and other characteristics.

SCHOOL H is a university that does not have a specific business school. They have programs within the university. Executive Education reports directly to the university president and provides executive education for the entire university.

SCHOOL H

Name of PD: It has no specific name. But they have a center for enhanced learning where they have a couple of instructional designers and engineers.

PD: Active for 20 years

PD Structure: 4 people. They also have a pedagogic committee which gets together every summer in a workshop. SCHOOL H invites people from abroad to help in specific cases such as case studies, experiential learning.

PD Activities: They deliver workshops and lectures for the faculty to design the whole approach to a product. There is a concern to look if what they are teaching is still relevant. They would like faculty to work with instructional designers to better structure their programs, but the faculty is still focused on delivering content, thinking that their mission is simply to cover all of it.

At SCHOOL I, the focus is on the executive education. There are specific teams dedicated to digital learning, customized programs and open enrollment programs, respectively. "We have everything." (SCHOOL I)

SCHOOL I

Name of PD: No specific nomenclature. They do have a center for enhanced learning with a couple of instructional designers and engineers.

PD Active for 29 years

PD Structure: 25 people.

PD Activities: They have different people on the management team that they have to report to. They have a pedagogical committee, a pedagogical group that meets frequently, and an innovation team that also meets frequently.

The context at SCHOOL J also brings different possibilities and exhibits a pedagogical innovation-oriented configuration. SCHOOL J has: a pedagogical innovation committee, an academic board and a learning manager.

SCHOOL J

Name of PD: Pedagogical innovation committee.

PD Active for 8 years

The academic board and the committee for pedagogical innovation were created in 2012 and the learning manager role in 2019.

PD Structure: The committee has 8 faculty members, plus the education executive team, which would be about a quarter of the faculty members. There is one academic director per program, and a teacher can be on the academic board of several programs.

PD Activities: The pedagogical innovation committee works directly with academic directors and staff. The purpose of this committee is to ensure academic encouragement using innovative methodologies. Usually they evaluate and approve new methodologies for use in the educational program. The academic board makes sure that the outcome of the program is going well, if one, two or three different teachers who are in the program are using innovative tools and if the program objectives are being met. In addition, something that they have and are incorporating this year is a learning manager, a monitor that will work with the pedagogical innovation committee and the academic board and some school partners to make sure they're focused on the learning aspects and innovation programs. The committee meets every month or two and the academic board is constantly running its own programs.

In the School K, there is a Teaching and Learning Center focused on Faculty Management and Development and a history of pedagogical innovation which began in 2005 but it consolidated as a PD in 2012.

SCHOOL K

Name of PD: Teaching and Learning Center focused on Faculty Management and Development.

PD Active for 14 years

PD Structure: 12 full-time members.

PD Activities: Responsible for all the faculty "life cycle", from planning for the next 5 year recruitment efforts to the development of courses focused on student-centered learning and design learning experience. Also responsible for faculty evaluation in teaching, researching and institutional contributions.

There are the factors that led to and influenced the creation of PDs For School K the PD creation was a necessity "to ensure excellence in education and impact on society" (SCHOOL K). For SCHOOL J, an opportunity to innovate, to launch new programs, to explore

new topics, but also to deliver quality programs that impact regionally. For School J, they aimed to accelerate the changes in their programs and to professionalize coordination.

For SCHOOL H, they believe that the partnership of faculty and instructional designers helps the creation of better programs that are not solely focused on content delivery. However, there is still the challenge of dealing with faculty and people from other areas who do not approach them, and it is those who really need support.

SCHOOL I does not see the PD as an advantage per se. "There are no advantages. It is just a necessity. It helps to keep innovating, that is an advantage". In the same direction, SCHOOL K uses the area as a leverage to foster the culture of innovation, debate and the pursuit of continuous improvement mainly by the faculty and the methodologies and technologies they use to deliver student-centered programs.

We consider that the PD creation is used to meet needs and fulfill respective goals. But that does not mean there are no challenges facing each PD, as observed in Table 13:

Table 13
PD area general challenges

Institution	Challenge	Description
SCHOOL H	Faculty resistance; Perception of the need of change	Faculty resistance in changing the way they do things. The problem is a faculty that is quite successful at what they do and what they do works so far; so they don't really see the need to change. They have a very traditional culture and a market has not forced them to do anything new.
SCHOOL I	Collaboration; Knowledge sharing	Promoting collaboration and discussion among the Faculty body. "Making sure they are sharing knowledge. That is one of the challenges".
SCHOOL J	Finding a professional with the required skills to lead de PD	Finding the right person for this position is one of the challenges they face as the position requires very specific person. She or he needs to be a person who has industry knowledge and industry contacts as well, someone interested in both administration and management, but also in the academic field of programs. Therefore, finding someone appropriate for this role is quite a challenge.
SCHOOL K	Faculty resistance; Pedagogical mindset shift	There is still a lot of resistance from much of the faculty regarding the shift in mindset from thinking about teaching to thinking about learning.

Source: Data from the second phase of the research.

Some of the key challenges raised by the institutions are related to engagement and communication. Engagement involves awareness raising, since there is a need for change and visualization of the PD area as a means of collaboration and enhancement of results. We agree that promoting this engagement in a team of teachers who are among the best in their countries is no easy task since it is easier for them to have interest to study and evolve in their expertise area and not specially in pedagogical issues such as: learning theories, learning design, planning, adequate use of a variety of methodologies, technologies, etc.

The engagement aspect still raises a relevant issue, as it is not only behavioral but also conceptual. Shifting the focus from teaching to learning is a challenge that requires daily effort to develop the institution's shared vision of education, as well as an understanding that technology can be used as a powerful tool to achieve specific learning objectives and/or amplify the learners experience and possibility the creating of new content.

Another important challenge is the professional background of those who are a part of the PD team and, even more so, when it comes to the management of these areas. This challenge was pointed out by SCHOOL E in the first part of this research and shared here by SCHOOL J. It is desirable that the responsible for this Department has theoretical and practical expertise in management, experience in organizations, knowledge about teaching and learning, and executive education. One may deduct from this profile that the attraction and retention of these professionals is a relevant point for the success of the PD.

3.2.2 Practices of the PD

The following are the practices and perceived value regarding each of the dimensions we worked on in our pedagogical innovation framework. These elements bring the self-assessment of the managers of the surveyed PDs.

a) Faculty development

We asked the managers about some topics regarding the Faculty Development. Our measuring rule was that the respondent could classify the statements[2], considering: very often or always; 4-often; 3-sometimes; 2-rarely; 1-very rarely or never. (TABLE 15, APPENDIX D).

The two actions with the higher average (4.5) in this dimension were: 1) encourages faculty to watch others teaching (watch the pedagogical practices of their peers); 2) encourages faculty to participate in open-enrollment programs – as a participant – for content knowledge enhancement. In fact, to analyze the pedagogical model adopted and executed by other professors, could inspire the creation of better learning experiences. However, the observation does not provide technical knowledge that could actually instrumentalize faculty to rise to the task as needed. To know "what is done" does not necessarily explain "how it is done".

Also, turning to the second area with the higher average, the faculty is encouraged to participate in open enrolment programs for content knowledge enhancement. This content could be related to their area of expertise and not necessarily cover the pedagogical knowledge (i.e. learning theories, learning design methods, use of support technology etc.), that is necessary for innovative learning experiences. Even open-enrollment courses related to the teaching-learning process and that adopts a pedagogic model that provides both action and reflection by following the process homology principles, could have an educational paradigm that differs from the school's vision of education. Therefore, in those cases faculty has to make deeper connections between what they are learning, to how to apply the new knowledge to the reality of the Business Schools where they teach. Depending on the circumstance that can be very challenging.

The results also revealed that an action with another low average is related to the fact that the PD encourages faculty to shadow a manager, to understand the problems and challenges they face. Also, the PD encourages faculty to attend conferences focused on practical problems in their areas of expertise and encourages them to work with a specialized coach. If one of the great challenges of executive Business Schools is to understand the need

[2] The complete research instrument is available in the Appendix of this document.

of the market and add value to their educational solutions, these faculty development strategies should be explored more to shed some relevant light reveling areas to explore and how to explore them.

SCHOOL J described how its PD conducts Faculty Development: by working in partnership with other areas of the school: "they work with the Enterprise, Collaboration and Leadership Center. They also work with the Sustainability Center and work on many topics that allow them to see what happens in the region with a global focus". Practices like this may help the PD with the challenge of promoting training and continuous professional development for the school's faculty (TABLE 15, APPENDIX D). This development is directly related to the PD's capacity to provide learning innovation, as explored in the next topic.

b) Learning innovation

When discussing learning innovation in this study, we refer to the whole of innovation in teaching tools, methodologies and techniques, innovation in educational products/programs/curriculums. We asked, considering the dimension of Learning Innovation, what the Business Schools were doing (TABLE 16, APPENDIX D). The statements and its results were classified considering: 5- very often or always; 4-often; 3-sometimes; 2-rarely; 1-very rarely or never. The data revealed (with a 5,0 average) that all PD's investigated have 'actively suggested new products/programs/curricula changes' (i.e. courses for individuals or companies). That indicates that the PD is expected to understand demands from the market, trends in education and to propose different ways to respond to these needs. To face this challenge, many PDs promote formal events that allow a strong connection between the Business School and companies (clients) for the continuing exchange of experiences and learning (average 4.5). During those encounters it is possible to dialog and map demands and challenges faced by the organizations and executive. It is also a moment to present just how the educational solutions provide ways for the school to face those challenges.

One action that caught our attention was the low average (2.5) of using data science to understand online experiences of the students. There may be several reasons for this, among

them, the fact that schools may not provide a relevant online experience for the participants, or not having technological tools to collect the needed data on participant experiences, or not having specialized people to do that, or even that this data exists but is not analyzed. The use of technology to indicate strengths and weaknesses of the online experience could be a powerful tool to inspire faculty, instructional designers, project managers and other stakeholders involved in the learning design process and that aim to provide learning innovation in terms of products, services and learning experiences provided by the school.

Another innovative initiative which received a low score was related to the incubating of education startups within the Business School with the mission to develop innovative teaching tools, methodologies and techniques. We know that in the creation of an innovative pedagogic model, it is necessary to articulate organizational aspects, with of content, methodologies and technology. To be able to incubate technological solutions within the school could open a variety of possibilities for pedagogical innovation since it helps the school to achieve the integration of learning goals. Some education institutions have already started creating "Labs" in order to innovate. This is something that we will probably see more of in the coming years.

Another feature that scored low (2.5) was the one on inviting external groups of diverse professionals (i.e. managers, artists, designers, doctors, philosophers, musicians, film directors, psychologists, etc.) to participate in brainstorming sessions to create new teaching tools, methodologies, techniques, paradigms etc. Although this is indeed a very specific issue, we understand that collaboration with these groups may be relevant to understanding diverse viewpoints, possibilities for innovation, and reviewing mindsets about teaching and learning. In phase 1 of the research, we saw some initiatives like this at SCHOOL E.

c) Learning design

Business Schools have greater concerns with learning design since the scores are in general higher than those of the other dimensions analyzed. It also reflects on the faculty

development since most schools showed concern in training faculty in this area (TABLE 17, APPENDIX D).

The main practices adopted by all responds are related to the curricular principles of the institution as a whole (i.e. student-centered learning, autonomy, meaningful learning, active and collaborative learning) and improving the developed programs based on feedback from the institution, students and teachers. These results indicate that the schools are concerned with maintaining or building a reputation based on specific pedagogical educational characteristics and principles that make them unique. In addition, they understand that is pivotal to know and act based on feedback received for many stakeholders engaged in the learning experience. This concern and openness to change what needs to be improved is articulated by the people centered design paradigm that orients, according to Reigeluth, Myers, Lee (2017) contemporary learning design practices.

Another area that scored highly (5.0) was the mobilization of interdisciplinary teams. It seems that PD departments understand that one of the fundamental principles of design is co-creation and that the expertise of professionals from different backgrounds may truly enrich the learning design process.

The lowest score (3,75), was related to the PD promoting internal workshops conducted by specialists in educational design to train Project Directors (or similar professionals), by presenting new tools and methodologies that can help them impact the overall client experience. This result raised the question on who is providing the learning design training to the faculty and what kind of content is presented.. It signals that one of the main practices adopted by the PD regarding faculty development (average 4.50) was related to the design and delivery of programs that emphasize learning design methods and strategies.

d) Digital culture

Considering the Digital Culture dimension, we tried to understand what Business Schools are doing (TABLE 18, APPENDIX D). The highest score (4.5) concerning practices oriented to Digital Culture are related to the production of digital content, materials, resources to enhance learning. This practice reveals that the schools are investing in digital transformation of program content (i.e. texts, videos, infographics, imagens, concept maps etc.). However, the production and availability of digital content for participants (in online or blended programs) does not necessarily mean that Business Schools are using available technology to engage participants in meaningful and relevant individual and/or collaborative learning activities. Therefore, considering the power that technology has to potentialize the delivery of participant centered pedagogic models, PDs should explore a variety of tools and resources aligned with the appropriate methodology for engaging learning experience.

It also became evident that most the PDs are training teachers and course managers to make the best use of available technology (score 3.75). Since the schools are investing in Virtual Learning Environments, new software, apps, programs, among others, it is important to let the faculty and project managers know how to explore those resources to give support to existing pedagogical practices or to be incorporated in new products/services (new online or blended programs, access to virtual libraries or laboratories, participant/participant communication tools etc.). This training could provide faculty, course managers and other stakeholders engaged in program design with fundamental information that could inspire and promote pedagogical innovation.

On the other hand, the lowest score (2.75) was related to the PDs practice of establishing and using metrics to understand the effects to justify the use of digital technologies. After those metrics are defined, executive Business Schools have to decide on which methodology to collect and analyze data to determine which digital technologies may add value to the participant experience. For this reason, PDs still have to evolve in the area of learning analytics that can measure participant skill development and performance (in projects or tests, for example). The understanding of the effects of the use of digital technology can also determine

which practices and should be eliminated, revised, maintained or disseminated to provide pedagogical innovation.

e) Executive education mapping trends

Concerning practices oriented to Executive Education Mapping Trends (TABLE 19, APPENDIX D) the highest score (4.5) was related to the PDs doing primary research and studies with current clients, potential clients, non-clients, educators, companies, visionaries, other higher learning institutions, market consultants, other researchers, etc. As a result of the primary research, the schools have access to exclusive information that may be used to guide learning design and learning innovation processes. Thus, the result of research with different stakeholders that have direct and indirect impact on the executive business education market should give insights and provide data that can impact the strategy of the school to keep programs relevant for the executive world.

One of the lowest scores was related to the PD practice of visiting incubators and think-tanks to direct future education design, processes, methodologies and thinking (i.e. Silicon Valley), to consider a new collective vision for education to attempt to understand what happens next and (a score of 3) benchmarks and going on technical visits to startups, innovative and state-of-the art companies. Those two practices are connected because they demand the availability of the PD to create a relationship with those who traditionally could not be well known in the business education market. To be able to schedule technical visits to incubators, think-tanks and startups, for example, demands knowing where to find them and building trusting relationships. Among the many activities that the PDs already have, this is one that may be the farthest from their reality but that could be explored for its potential to promote pedagogical innovation.

f) Participant learning experience

This was a dimension that presented similar and high scores. This shows that schools are concerned with the overall learning experience participants have in their programs (TABLE 20, APPENDIX D). The practices that got the highest scores (4.75) related to this experience were evaluation of the program proposal, mapping if the participant would recommend the

program to others and evaluating participant satisfaction of the learning experience at the end of the program (5.0). The first practice takes place before the program is offered and the second and third when the program ends. They are related because the second shows if the learning design created was delivered in such an impactful way that participants demonstrated satisfaction with the learning experience and would recommend the learning experience to other executives in his network.

Knowing the relevance of a good recommendation by an executive, indicated that schools are adopting other practices that had high scores (4.5): promoting interaction among program participants and stimulating collaborative learning also mapping the learning needs and competencies to be developed by participants. As mentioned before in this report, one of the reasons executives enroll in Business School programs is to network with other executives. The chance to interact and work in collaboration with people from other areas, markets and organizations makes for a much richer learning experience. Also, it is expected that the executive develops certain competencies and that their practices in the organizations where they work are impacted by the executive education experience.

One practice with a 4.25 score is already used by the PDs but that could be better explored even in faculty development trainings is the use of learning strategies that are aligned with program learning objectives. When those objectives are clear to all the stakeholders involved in the participant learning experience, all efforts flow in the same direction.

In addition, it was possible to identify the actions of each school in the promotion of pedagogical innovation in their teaching and learning environments. The areas with higher scores and that represent practices adopted by most PDs were related to the dimensions of learning design and participant experience (TABLE 21, APPENDIX D). Those dimensions are followed by Faculty Development. Although the dimension of Faculty Development appeared among the lowest evaluated, the average score showed that it had the highest rating. We infer that this difference was due to the statement in the table 14 (APPENDIX D), which links Faculty Development directly to training. In fact, many actions make up this dimension and, in the end, the schools studied have a relevant score (4.14) in this context (TABLE 21, APPENDIX D).

Finally, the dimensions with the lowest scores are Learning Innovation (3,53), Digital Culture (3,54) and Mapping Trends (3,92). These are definitely areas that can be further explored by the PD and could be useful to help achieve the goal of pedagogical innovation in business education.

Among the activities and roles performed by PDs (TABLE 22, APPENDIX D), we understood that it was necessary to verify the learning strategies used in the institutions (TABLE 23, APPENDIX D). The expressive presence of case studies (4.5) shows that case studies (Harvard, Company Cases, Benchmarking Cases of other companies, etc.) are used extensively by the Business Schools of this study. This use comes naturally from the characteristics of the applied social sciences: working with knowledge applied to reality. This feature is also related to the frequent use of Learning 70-20-10 (on the job, training and peer learning). It is important to consider that both the case study approach and the Learning 70-20-10 approach are generally tailored and hybrid. This means that there is a broad and diverse view of these methodologies and their uses (TABLE 23, APPENDIX D).

The assertion Project-based teaching workshops has also demonstrated frequent use in institutions (4.5), which is related to continuing faculty training and seems to be among the best practices of these institutions. In terms of methodology, business games (computer simulations, involving group decision-making), is strong in three schools, as is the use of active methodologies (Problem Based Learning; Team Based Learning) which received a significant mean score (4.25). This demonstrates the schools' search for active and collaborative methodologies, as well as teacher preparation for the use of student reality in the teaching and learning process. For specific and personalized cases, the practice of individual coaching (4.25) also appears frequently among the answers.

Among the lowest average scores are Immersion Learning (1.67) and Big Data, Machine Learning and Deep Learning (2.0). This issue is an alert in terms of pedagogical innovation. There is a lot going on in the world, but Business Schools are not necessarily, assimilating this digital culture. On one hand, we consider that technological aspects are means for learning and therefore need to be oriented towards promoting learning. They are not an end to themselves.

On the other hand, it is necessary to decipher the potentialities of the use of technologies and, increasingly, to incorporate a digital culture into programs and learning. Since we highlight digital culture here, this dimension is still one of the most relevant points of development and is evidenced by the low frequency of the use of mobile learning (training via mobile devices, such as tablets and smartphones) (2.75). Aspects such as mobile first, or bring your own device still seem far from the reality of some institutions of excellence in business education.

Gamification (use of techniques, strategies and game design in educational programs) (2.0) and Digital Storytelling (presentation of content through the art of storytelling with a variety of digital media) (2.25) also demonstrate areas of potential development and are not yet frequently exploited by the institutions.

4 CONCLUSIONS

The main objective of this study was to discuss best practices of some major Business Schools around the world concerning pedagogical innovation through a broader perspective of the responsible for the Pedagogy Department (PD) (Executive Director, dean or similar position) of 11 major Business Schools. Considering the secondary objectives, the study tried to identify the contributions and values generated by the PD initiatives and analyzes what the Business Schools were doing, regarding the conceptual framework suggested in six (6) listed dimensions (faculty development, learning innovation, learning design, digital culture, executive education mapping trends, and overall participant experience). These dimensions and its categories under investigation were used to map the pedagogical innovation, trying to have a systemic perspective of it.

The section that follows is a summary of the major findings of the study, particular to the context of the Business Schools investigated. The limitation of the research will also be presented followed by suggestions for future studies.

4.1 Summary of key points

The data presented in the previous chapters provided evidence for the following reflections and conclusions:

a) The PD has yet to become a consolidated department (sometimes nonexistent) in most major Business Schools, and requires professionals with a senior profile

The applications of PDs showed significant variations in depth and breadth. Elements such as the structure, scope, and concepts that underlie each of these areas seemed to culminate in the way they operate and function. Among the most outstanding activities in each PD, special attention was given to the use, assimilation, adaptation or creation of learning design methods, teaching and learning strategies. While some analyzed schools had the PD focused on faculty development, we identified others with a broader scope, also responsible for the learning

innovation, mapping trends, learning design, and digital business strategy. Some of the schools investigated have a specific area (PD) to deal with pedagogical innovations issues; others have this function in a decentralized way (they do not have a PD). In most of the cases, we noticed that this is a small area, with few employees (from 3 to 12) – directors, faculty members, project managers and support staff, that requires a senior professionals profile - solid academic background, but at the same time, good market perception. Finding appropriate people with both perspectives is both a challenge and expensive.

b) We expected to find more innovative practices in terms of Teaching and Learning than we observed in the investigated cases

Some respondents cited that having a PD because of the necessity to maintain student satisfaction and course quality and this department plays an important role to encourage pedagogical innovation, supporting faculty and business areas by creating differentiated solutions in open enrollment, customized and degree programs. In the past, faculty would have to do these activities themselves, but now they have a team of talented and capable people helping with new ideas, new methodologies, new technologies and as a result, participant perception of value increases regarding the educational service received. However, even considering that the respondents were unanimous in affirming PD's importance, we expected to find more innovative practices in terms of "Teaching and Learning" than we observed. Few investigated schools put effort in creating their own methodologies, seeking to be at the leading edge of management education, building solutions to help clients meet the emerging future. Some institutions recognized the importance of seeking external partners to complement the PD´s capacity, to add value in their business, as partners specialized in new technology, digital platforms, gamification, etc., giving teachers a wider spectrum of possibilities to innovate in methodology. However, few actually developed partnerships with suppliers in order to offer artificial intelligence and machine learning.

c) The two main challenges faced by the PD were innovation and scope along with a great variety of demands that needs to be attended by this department. In some of the

investigated Business Schools there was evident resistance by faculty to pedagogical innovation and to the PD. The culture of innovation still remains a considerable challenge

Even the schools that had a PD as a consolidated department face some challenges, specially related to innovation and scope, along with a great variety of demands that need to be attended by the area. Limited resources, high costs, engagement and communication were other challenges cited by some managers. Engagement involves awareness raising, awareness of the need for change and visualization of the PD area as a means of collaboration and enhancement of results. We agree that promoting this engagement in a team of teachers who are among the best in their countries is no easy task since it is easier for them to have interest to study and evolve in their area of expertise, rather than deal with pedagogical issues such as: learning theories, learning design, planning, adequate use of a variety of methodologies, technologies, etc. The engagement aspect still raises a relevant issue, as it is not only behavioral but also conceptual. Shifting the focus from teaching to learning is a challenge that requires a 24/7 effort to develop the institution's shared vision of education. Furthermore, understanding that technology can be used as a powerful tool to achieve specific learning objectives and/or amplify the learners experience and the creation of new content also becomes a challenge. Other challenges pointed out with less intensity were: dissemination of the work developed by this department, justification of its existence, market competition, portfolio construction, professional background, school success, and understanding the needs to value creation. Specifically considering the professional background of those who were a part of the PD team and, even more so, when it comes to the management of this area, it was desirable that person the responsible for this Department have theoretical and practical expertise in management, experience in organizations, knowledge about teaching and learning, and executive education.

d) Few Business Schools investigated evolved much regarding to personalized learning (flexible learning - each participant chooses their learning journey, taking into account individual characteristics and interests), but most of them were focused on stimulating ways to learn and overall group of participants experience.

In recent years, the Business Schools started to understand that individuals learn differently, and for that reason, they should deliver knowledge for long-term impact, using the right mix of learning methodologies and providing a unique learning experience. Unlike the conventional curriculum programs that follow some mandatory disciplines, the systematic of personalized learning proposes to reconcile the skills demanded by the market with the participants' personal aspirations. This gives them autonomy as each one conceives their own learning path based on conveniences, needs, starting point and objectives. In this way, the participants are the protagonist of their training and qualification. To operate, adaptive platforms utilize a combination of big data and Artificial Intelligence (AI) technologies to identify preferences, assimilation patterns, strengths and weaknesses. The objective is to improve individual development, recognizing the way that each participant learns. This includes, among other things, the times and formats for delivering content most useful to participants' profiles. In our study, we perceived that the Business Schools have not evolved much regarding personalized learning (flexible learning - each participant chooses their learning journey, considering individual characteristics and interests). Few schools mentioned innovative initiatives in this sense. One of the schools mentioned a highly personalized service developed for people willing to build together with the school a unique, flexible learning path. In the overall learning path, the participant received the support of an educational mentor, an expert in professional development that provokes, guides and stimulates it advances. We noticed that there is still much to evolve when it comes to personalized learning. Some challenges pointed out by the respondents were: the need of high plan and execution for it to succeed, major shifts in teacher practice (they are no longer the experts in the classroom but rather the facilitators of the learning process), meeting the diverse needs of participants while staying true to curriculum content and standards and the evaluation process.

Most of the investigated schools were focused on stimulating ways to learn and the overall participant groups' experience. Schools were combining traditional lectures with digital technologies, focusing much on classroom experience as well as using experiences outside the classroom. During and after the program, participants had access to value-adding services aimed at enhancing their learning experience. Some of the investigated schools were looking

at the learning process from a broad and systematic view since it should provide life-changing learning experiences to allow individuals to have a real impact in their personal and professional life. For those who already participated in one program in the past and are now looking for direction in their "next act", the schools can offer new programs, as continued education. These participants become lifelong learners in the Business Schools.

e) Lack of clarity about the concept of innovation in Education

The activities of the PDs we studied were all directly or indirectly connected with educational innovation. However, the dispersion regarding the concept of educational innovation drew attention. This conceptual dispersion represented a challenge for us since the beginning of the research. For some schools, innovation in education is the same as innovating in products and services. In other words, the focus of the PD is on the creation and improvement of new products. For others, educational innovation is about innovating in the teaching and learning process, focusing on new methodologies and approaches. Yet, for other schools, innovation encompasses all these issues and it is related to both process and outcome. Although there is a feeling that they promote innovation, the activities of the PDs promote several results, among which some are in fact innovative, but others promote small changes and deliveries. Within this dimension, there were emphasis on the faculty development, once this is an important factor to promote educational innovation. However, innovation is a broader concept, which embrace and goes beyond the whole teaching and learning process. For example: innovative programs, new business models of education, infrastructure, integrative assessments, special participation of stakeholders (C-Level executives, specialists, etc.) who can share experiences, technologies, simulations and other resources that can improve the process and the outcome. We understand that when it comes to educational innovation, it is important to test the new, make mistakes and learn from them, prototype new programs and experiences and look constantly to improve/adapt what is already a success.

We emphasize that the innovation demands the articulated use of several elements that make up the design of an educational solution. Nevertheless, innovation is limited to what the different actors in the institution believe about it, and more important, what the institution

expect from the PDs in terms of educational innovation. The horizon about innovation in education is broadened through different actions pointed out in this report, but some of the schools demonstrate the potential to better articulate their possibilities for educational innovation and generate wider outcomes. There is a wealth in the plurality of actions related to innovation in the institutions studied, but there is considerable variation in the way of evaluating the added value and, sometimes, this finding is limited. We understand that this plurality demonstrates the lack of clarity regarding the concept of educational innovation among schools.

f) While some Business Schools are eager for change and attentive to trends (active position), others are in their comfort zone, waiting for their participants to demand changes (passive position).

Considering the increasingly competitive market and the demanding participants of executive programs, it was expected to find in all investigated schools posture focused on the constant search for innovation – a continuous search for the most innovative in new methodologies (assimilating transformations by creating methods to attract participant attention and offer knowledge to them, adding to something beyond what they could get on the internet), greater use of new technologies in the classroom, growth in the development of hybrid or online programs and greater concern of schools in the development of personalized learning. However, while some of the schools were eager for change and are attentive to these trends, trying to continuously change (active position), we noticed others comfortable in their comfort zones, waiting for the participants to ask for changes (passive position) - why change if they are leading institutions and business is going so well? One respondent said that smaller or lesser-known institutions were forced to innovate because they were in imminent risk in a highly competitive market and they were literally going to go out of business if they did not innovate. For the respondent, institutions that were leaders and exponents in the executive education market were far from this risk. This opinion left us intrigued, but it also refers to the perception of the minority of respondents. For us, the reality is implacable and the need for a

new perception of innovation in pedagogy and the ability to adapt is evident in every country, to all schools no matter size or influence.

4.2 Brief Discussion of the six (6) listed dimensions

Considering ***Dimension 1 – Faculty Development***, most schools indicated that the PD (1) encourages faculty to watch others teaching and (2) encourages faculty to participate in open-enrollment programs – as a participant – for content knowledge enhancement as the main practices for faculty development. Both actions are not enough to promote pedagogical innovation as the observation does not provide technical knowledge that could actually give faculty the tools for the task at hand. Regarding the participation in open-enrollment programs, this could be related to their area of expertise but not necessarily cover pedagogical knowledge (i.e. learning theories, learning design methods, use of support technology etc.), that is necessary for innovative learning experiences. In that case, we assume that pedagogical innovation would be stimulated if the PDs could use learning design strategies to create the executive programs to prepare a continuous faculty development program that articulates: the schools' vision of education, best faculty practices, trends in executive education, new methodologies, creative use of technologies among other subjects and practices that would prepare the faculty to deliver an impactful learning experience to program participants.

Exploring the ***Learning Innovation (Dimension 2)***, most PD's investigated indicated that their main activity was related to the suggestion of new products/programs/curricula changes by specially promoting formal events that allow a strong connection between the Business School and companies (clients) for the continuing exchange of experiences and learning. The findings showed us that very few schools were investing in: 1) using data science to understand online experiences of the students; 2) incubating of education startups within the Business School with the mission to develop innovative teaching tools, methodologies and techniques; 3) inviting external groups of diverse professionals (i.e. managers, artists, designers, doctors, philosophers, musicians, film directors, psychologists, etc.) to participate in brainstorming sessions to create new teaching tools, methodologies, techniques, paradigms etc. We believe that these 3 suggestions could help to improve and develop innovative teaching

tools, methodologies and techniques, as we observed in those schools that were already implementing these practices and obtaining good results.

Dimension 3 – Learning Design was directly related to the PD's relevance for their clients and the results show general higher scores than in the other dimensions analyzed. In fact, learning design is also a strong area where faculty development is focused on. Although it became evident that schools were concerned in maintaining or building a reputation based on the educational principles, they hold on specific pedagogical characteristics that make them unique. For this reason, PDs consider curricular principles of the institution as a whole while acting based on feedback received by the stakeholders engaged in the learning experience. Also, as a part as PDs pedagogical innovation initiative is the mobilization of interdisciplinary teams that participates in the learning design process.

Considering ***Dimension 4 – Digital Culture***, it was pointed that some schools had intentional actions towards the development of a digital culture in the teaching and learning process, while others still use technologies, but under an analog approach (only to produce and deliver content and not necessarily in meaningful and relevant individual and/or collaborative learning activities). The data also shows that the PDs are training faculty and course managers to make the best use of available technology to provide fundamental knowledge and practices that can promote pedagogical innovation. Some respondents pointed out they felt no pressure from the market and understand that many students still prefer the traditional face-to-face learning model. We perceive that the maturity of the investigated schools, concerning to online programs, was different and it probably affects the digital culture in the whole school. But we were surprised to notice that some outstanding schools were not yet advanced in this regard. Most investigated schools were developing digital solutions to open enrollment and customized programs, creating internal material to support online classes (fundamental series, podcasts, cases, opinion videos, interviews etc.), selecting potential external partner to produce content (developer partner), monitoring digital platform changes and so on. Many of them had specific teams focused on digital learning, and in some cases, the PD was responsible for it. In other situations, there was another area taking care of the digital programs (i.e. IT) but interfacing and dialoguing with the PD. Some of the schools believed they were doing something special

considering digital solutions, however, others, admit that they were not reinventing it all. Some respondents highlighted that they started to offer digital solutions as a reaction from market pressure.

When it comes to ***Dimension 5 – Executive Education Mapping Trends,*** in general, schools were concerned about the future and each, in its own way, were trying to understand their own future scenario – some were very active in mapping trends. Primary research and studies with current clients, potential clients, non-clients, educators, companies, visionaries, other higher learning institutions, market consultants, other researchers, etc. was the practice most used by the surveyed schools. Practices that were not being used but could be further explored by the PD to get insights were: visiting incubators and think-tanks to direct future education design, processes, methodologies and thinking (e.g. Silicon Valley), to consider a new collective vision for education to attempt to understand what happens next and benchmarking and doing technical visits to startups, innovative and state-of-the art companies.

The study revealed that one of the main focuses of the PD is on ***Overall Participant Experience (Dimension 6)*** and it is directly related to the school's business performance and impacts its competitive advantage. We identified that Business Schools were more open to give freedom to faculty to implement new things, focusing on participant experience. Also, we observed in some schools the role of the "experience assistant", who is responsible for ensuring the excellence of the students' learning experience throughout the course, from interaction with faculty, to solving administrative or problems related to comfort in the classroom. It is important to note that the schools were focused on the participants experience during and after the program – they want to make sure to stay in touch with participants after the course. In this sense, it is important for everyone to understand their role in providing a relevant and coherent learning experience that brings value to the participant in the personal and professional dimensions. Schools want the participant to be impacted with the program and to take another course with them again. This idea is based on the concept of lifelong learning.

4.3 Limitation and Future Research Suggestions

The scope of the conclusions is limited to the context of the Business Schools investigated. Although the research has provided relevant academic and managerial contributions, the sample size can be considered the main limitation of this study. The schools investigated are a small proportion of the population of the Business Schools that are Unicon affiliated. However, it was difficult to identify many other schools that had a mature and functioning PD to be included in the sample and that could have brought complementary information to the study. In addition, the limited access to top schools, a larger scope of the sample proved to be unfeasible for the study in question. Even if definitive conclusions cannot be suggested, the respondents' answers presented interesting observations for the reflection of the study objectives. As a suggestion for future studies, other schools could be studied (considering as a prerequisite those schools that had a PD for at least 2 years), which could enrich the portrait of the practices employed by the schools and bring new insights to the study in question. It is important to emphasize that the data is limited to the interviewee's point of view and do not represent the totality of the perceptions of the investigated schools. The qualitative research is multi-method in focus, involving an interpretive, naturalistic approach to its subject matter, and represent the perceptions of a group of top schools surveyed. There is a risk as to the subjective character of the answers, which being personal perceptions, may present some bias (answers that do not translate their true opinions, consciously or unconsciously, for example, to project a positive image of the school). In this sense, the results described should be taken more as elements capable of subsidizing the understanding about some of the interviewees' conceptions of how they see the Pedagogy Department rather than the final statements of the researched schools.

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APPENDIX A - LITERATURE REVIEW

In the digital age, organizations and executives have sought out Business Schools with the expectation that they offer quality educational solutions relevant to the global challenges of the corporate world and aligned with current business trends in pedagogical innovation. International prominent Business Schools have some features in common, some being:

- Training leadership and management executives based on a strong articulation between theory and the reality in which organizations and the business world function;
- Using learning methodologies, technologies and strategies focused on leading role of the participating executives;
- Creating immediate value for organizations when program participant knowledge is applied to the context in which each participant operates;
- Allowing networking among highly qualified executives and to learn from their peers;

- Designing customized educational solutions to meet the demands of different teams in organizations;
- Offering individual coaching programs to develop, in executives, leadership and management skills.

To cope with these demands and others in an innovative way, Business Schools have organized themselves in different manners and adopted various practices. Some schools have an area called Pedagogy Department (PD) that develops and orchestrates various educational actions, acting as a catalyst for pedagogical innovation. Others, in turn, do not have a PD in their organizational structure, but still use internal and external personnel and resources to incorporate innovations into their practices. Empirical research identified six major assumptions that underlie pedagogical innovation in the Business Schools investigated and that will be conceptually presented in this section, according to the literature review.

2.1 Faculty development

Professors working in Business Schools of academic excellence have deep theoretical and practical knowledge of content in their area of expertise. Many of them have received an academic education focused on the transmission of content, so their work is largely focused on the creation and dissemination of knowledge (Bilimoria & Mainelis, 1999).

In recent years, Faculty Development has gained special attention in Business School strategy. Pedagogical innovation is seen as the ability of teachers to design relevant and impacting courses and programs for professionals working in the business world (Walder, 2014, Hockerts et al., 2015). The need to invest in Faculty Development emerges from changes in the profile of professionals seeking Business School. It has also become visible through the need to understand learning theories centered on those who need to learn, participant interest in methodologies that articulate theory and practice, and the demand imposed on many schools, for digital technologies to be used in and as educational solutions in executive education

(Jarošová et al., 2017). However, there are several challenges in the creation and provision of Faculty Development such as financial resources, human resources and time of teachers who perform various activities including: teaching, research, monitoring of academic activities of the programs, participation in school meetings, the production of scientific content, participation in events, etc.

Faculty Development programs aligned with the concept of pedagogical innovation offered by Business Schools aim to instruct the faculty to create effective innovative pedagogical models. They may be designed from a variety of objectives, one of which is the creation of programs that focus on learning (rather than on the transmission of knowledge) and explore different application strategies focused on promoting impactful learning experiences. In addition, they focus on sharing values, knowledge and expertise through experiences, conceptual and practical learning about teaching-learning processes and elements related to executive education. Thus, Faculty Development programs must be closely linked to the school's business model. Listed below are some strategic actions that represent the categories adopted in this study, as explained in the methodology section of this report. Such actions that may or have been implemented by Business Schools to develop their faculty, by:

- Developing of formal programs, providing an opportunity for faculty to see themselves in action, experience learning activities and teaching techniques – participating in programs created specifically for faculty by the PD or other areas of the school. Such programs develop competencies that the school considers fundamental for the teaching practice;
- Encouraging of faculty to watch others teaching and give them feedback – sitting in on other teachers' classes to learn new ways to structure pedagogical models and then use them in their own classes;
- Encouraging faculty to participate in open-enrollment programs – as a participant – for content knowledge enhancement – participating in open programs offered by the Business School where faculty teach or courses offered by other educational institution;

- Encouraging faculty to find a mentor to advise, explore teaching ideas and share teaching material – mentoring process performed by a more experienced faculty member who, among other activities, evaluates the pedagogical model and gives feedback for improvement in pedagogical practices among other aspects;
- Encouraging faculty to work with a specialized coach – developing faculty with the support of a specialized coach in the areas where there is a need to develop a specific need, such as soft skills;
- Encouraging faculty to shadow a manager, to understand the problems and challenges facing managers – exposing oneself to the reality of one or more executives by following their daily activities and challenges faced in their work routine;
- Encouraging faculty to attend conferences focused on practical problems in their areas of expertise – participating in scientific events presenting academic papers, case studies and/or participation in updating and expanding understanding of activities in certain areas of knowledge;
- Encouraging faculty to gain experience with executives by doing consulting or putting in practice what they teach – articulating theory and practice when developing consulting projects that can be implemented in organizations or working in partnership with executives.

These actions can be implemented individually or in collaboration with others. However, regardless of how Business Schools develop their faculty, it is important that the model chosen provides both action and reflection (Schön, 2009). This means that faculty must be trained through the strategies and mindsets that they are expected to use in their professional practice.

The project of pedagogical innovation of Business Schools involves the development of faculty and the co-creation of pedagogical models shared by the faculty members.

2.2 Learning design

Learning Design is the framework that supports learning experiences and refers to deliberate choices about what, when, where and how to teach. Decisions need to be made about the content, structure, timing, pedagogical strategies, sequence of learning activities, and the type and frequency of assessment in the course, as well as the nature of technology used to support learning[3].

The need for pedagogical innovation stems from the complexity of our current world and the educational phenomenon. Business Schools have long understood that courses and programs need to be offered to enable participants to learn in a personalized, collaborative, relevant and engaging manner by adopting learning-centered rather than teaching-centered educational approaches (Jarošová et al., 2017). Learner-centered design can be conceptualized as the process of building learning experiences by focusing on learner challenges and building fitting solutions by working through an iterative process.

Now, Business Schools focus on learning design, which is the area of knowledge that "studies how to support teachers in devising suitable activities for their students to learn" (Bakharia, et al., 2018, p.1). This area presents methodologies and technologies that allow the design of appropriate (and preferably innovative) educational environments and solutions.

In Business Schools, the learning design process is traditionally the responsibility of faculty; however, by offering blended or online programs, this task can now be shared with other professionals, such as instructional designers, project managers, program coordinators, etc., as can be seen in the results of this study. In this process, essential values that facilitate the design of a pedagogical model that fosters pedagogical innovation should necessarily be considered.

Reigeluth, Myers and Lee (2016) recommend the creation of people-centered pedagogical models. The use of learning design models centered on the needs of executives seeking Business Schools encourages customized and even personalized learning experiences to be created and delivered. To this end, design strategies, such as Learning Design Matrix,

[3] https://www.smartsparrow.com/what-is-learning-design/

Apprentice's Journey Map, Personas, Brainstorming, Prototyping are now being adopted to promote empathy, co-creation and testing of educational solutions to improve and adapt design strategies for different learning demands (Cavalcanti & Filatro, 2017).

Business Schools have developed learning design strategies by adopting one or more of the following practices:

- Hiring high level professionals (senior Project Directors or similar) with practical experience and experts in learning methodologies that can design and deliver high performance programs – teams composed of professionals recognized for their technical and theoretical knowledge and the quality of the executive education programs they design;
- Promoting internal workshops conducted by specialists in educational design to train Project Directors (or similar professionals), by presenting new tools and methodologies that can help them to impact the overall client experience – training conducted by internal or external experts to facilitate learning new methods to design a quality pedagogical model that creates value for executives;
- Considering the curricular principles of the institution as a whole (i.e. student-centered learning, autonomy, meaningful learning, active and collaborative learning) – this considers the characteristics of the pedagogical model that the school wants to implement in its programs;
- Mobilizing interdisciplinary teams – collaboration between professionals working in different fields (i.e. teachers, project managers, instructional designers, program coordinators, etc.) in co-creating learning design models;
- Creating new programs based on educational trends and research results - mapping of methodological and technological trends in the educational field embedded in the pedagogical model;
- Developing prototypes and applying to test groups – building and testing prototypes and creating pilot programs so that designed educational solutions are tested, evaluated, refined and improved;

- Predicting diverse learning assessment strategies – adopting various diagnostic evaluation strategies (applied before the program, course or discipline to check the participant prior knowledge of the topics), procedural (consisting of activities carried out during the program by offering course or discipline such as seminars, projects, discussions, case studies, portfolios, etc.) and summary (knowledge acquired maps by the participant usually at the end of a discipline or course from taking exams, writing articles, etc.);
- Considering the alignment between content, methodology, technology and organizational aspects of the institution – intentional search, by the people involved in the learning design process, of the coherent articulation between the various aspects that make up the pedagogical model;
- Developing programs under institutional demands – creation of new programs based on demands presented by Business School management and other stakeholders;
- Improving the developed programs based on feedback from the institution, students and teachers – improvement of educational solutions already offered by the business school from feedback received from various stakeholders involved in the learning process.

The planning and execution of learning design in Business Schools requires the creation of its unique policies and the adoption of practices that provide a technical view that should be inherent in pedagogical innovation. With this, schools are able to create policies aimed at improving the teaching-learning process so they that are aligned with their principles and values as well as with the institutional belief about what a high-quality executive education is.

2.3 Digital culture

The social and technological changes of recent decades have created a digital culture that impacts various areas of people's lives. Before the turn of the century, Don Tapscott mapped the profile of the generation that grew up in this digital culture. This generation has

been referred to by many terms (millennials, net generation, digital natives, to name a few), and is characterized as fluent in the digital world by using media and technology to buy, sell, socialize, work and learn (Tapscott, 1999, Walder, 2015). Those born after the turn of the century were called post millennials - the Generation (Rosen, 2010) - referring to the constant use of iPhones, iPods, and other mobile devices. It should be noted that these young adults are already inserted in organizations and are starting to attend Business Schools (Rosen, 2010).

Regardless of the similarities and differences between generations, some authors point out that digital culture has spread among people of different age groups (Prensky, 2007), which leads them to do many things at the same time, adopting a multitasking stance. Digital culture and mindset have impacted the way people learn, thus demanding the development of pedagogical innovations (Rosen, 2010). In the age of artificial intelligence, industry 4.0, machine learning, Business Schools and corporate education programs have resorted to a variety of supporting technologies to deliver innovative educational solutions.

The authors Mishra and Koehler (2006) reinforce that knowledge of technology cannot be isolated from the knowledge of methodology and content. Such technologies can be used in executive education courses and programs in a superficial or simplistic way, i.e. to present content in different formats in the classroom or digital spaces (in videos, podcasts, texts) or in a creative way that puts them into practice an innovative pedagogical model.

A study presented in the Apple Classrooms of Tomorrow research (ACOT) (Apple, 1991) identified five steps in the process of integrating technologies into teaching practice - representing the entry of digital culture into the teaching-learning process: exposure, adoption, adaptation, ownership and innovation. This demonstrates that pedagogical innovation is part of a process that demands technological use that may initially be limited, but that creative integration of digital technologies in the learning process can enhance efficient and engaging pedagogical practices. In the integration of technologies in the teaching-learning process, Business Schools have adopted some practices, as described below:

- Training teachers and course managers to make the best use of available technology – training of professionals responsible for the design and delivery of educational solutions to effectively and creatively use the technologies available at the school;
- Producing digital content, materials and resources to enhance learning – developing support materials, usually commissioned by teachers or project managers, that can enhance the learning process;
- Establishing and using metrics to understand the effects to justify the use of digital technologies – elaborating metrics and analyzing digital reports that present data that justify the investment for the use of digital technologies in the school's programs;
- Making available the latest technologies and digital content to achieve learning objectives – state-of-the-art technologies that are considered essential for achieving the learning objectives;
- Promoting a digital culture in the institution – providing infrastructure, devices and equipment that disseminate practices related to digital culture. Promoting events and spaces for sharing experiences and practices related to digital culture and their impact on executive education;
- Supporting services and provides platforms to improve teaching and learning through effective use of technology – formation of a support team that assists professionals involved in learning design and delivery of educational solutions to use the most appropriate technologies in order to achieve the proposed learning objectives.

Such practices can be managed and promoted by the Pedagogy Department or other areas created specifically for this purpose, as we will see in the results of this study. Finally, the integration of technologies into the educational solutions offered by Business Schools must be evaluated, refined and redesigned according to the characteristics of the programs, classes and participants. The goal is to enhance the process of building new knowledge and support practices that generate value inside and outside organizations.

2.4 Learning innovation

Executive education serves an audience that operates in rapidly changing and evolving markets. Thus, one of the major challenges for Business Schools is to think of innovations in their teaching tools, methodologies, and techniques in educational products (programs, courses, curriculum and technology, etc.), services (coaching, mentoring, secretarial, learning in highly technological physical spaces or humanized digital spaces, etc.) and curricula.

Published literature mentions various ways to conceptualize innovation. Silver-Pacuilla, Gray and Morrison (2011), for example, understand that innovation is an approach that obtains better results and/or products, platforms, processes or ideas. They explain that it goes beyond the creation of something new and should contain two fundamental elements: 1) it must be put into practice in a real context; 2) must be evaluated so that the implemented improvements are proven.

More broadly, we adopted in this study the vision of innovation proposed by Shavinina that conceptualizes innovation as ". . . the phenomenon of innovation is inherently multidimensional, multifaceted and interdisciplinary, particularly challenging, has social consequences, is cross-cultural and often surprising" (2003, p. 14). In this sense, when we think about the innovations that occur in a business school, we refer to new teaching techniques, methodologies, products, services and curricula that lead to learning innovation. We also refer to the contextualized renewal of existing products, services and teaching practices that add value to the participant of school programs (Noruzy, et al., 2017). This type of innovation involves the adoption of new practices to improve the efficiency of the learning process, the quality of products, services and educational solutions offered by the school. Zhou and Li (2012) point out that innovation is part of a multidisciplinary process, since several stakeholders must be involved in the design, development and implementation of new practices. The authors also explain that the ultimate goal of innovation is to meet customer needs and expectations with quality delivery that generates value. In this sense, Hertog (2010) indicates some fundamental factors in the innovation process:

> In-depth understanding of customer needs and a systematic study of technological advances, conceptualization of ideas provided for formulation of ideas, severability and composition of current services, cooperation with other organizations to produce and implement new innovations, standardization of developed innovations, and organizational learning as the most important factors of organizational dynamism for innovation management of service organizations (Noruzy et al., 2017, p. 130).

In education there are many responsible actors, to a greater or lesser degree, for the design and facilitation of pedagogical innovation: teachers, students, designers, specialists, educational managers, technology solution providers. Each actor sees learning innovation from a different perspective. This is why the people-centered paradigm (Reigeluth, Myers & Lee, 2016) can be fundamental to the learning innovation of a business school. This innovation demands the articulated use of several elements that make up the design of an educational solution.

From an understanding of the multiple dimensions that accommodate learning innovation in executive education, we present some practices adopted by Business Schools:

- Actively suggesting new products/programs/curricula changes (i.e. courses for individuals or companies) - analysis and indication of aspects that need/may be appropriate in school educational solutions;
- Promoting formal events that allow a strong connection between the Business School and companies (clients) for the continuing exchange of experiences and learning - bringing the school closer to the reality of organizations in events that focus on the exchange of knowledge, cases, experiences and challenges;
- Identifying opportunities in the market (potential education suppliers) for purchase, partnership or development of new methodologies and technologies - mapping suppliers that have technological and/or methodological solutions that when acquired respond to the demands that emerge from the learning objectives outlined for the programs;
- Establishing partnerships with product and service suppliers, in order to have the most competitive LMSs, plugins, and technologies that measure learning, giving teachers a

wider spectrum of possibilities for innovative methodology - access to quality technology solutions from supplier partnerships;

- Establishing partnerships with suppliers in order to offer Artificial Intelligence and Machine Learning to support methodologies adopted by Executive Education Business School teachers - access to cutting-edge technology solutions from partnerships with suppliers;
- Participating in workshops, courses or immersion programs, inspiring development of innovative teaching tools, methodologies and techniques - participating in quick and inspiring events and/or training programs;
- Exchanging teaching methods between a partner institution and developing joint teaching materials - development of relevant and well produced materials with partners;
- Promoting workshops with the school's alumni and current students in order to co-create teaching methods, techniques and tools - considering ideas and suggestions of alumni who are active in their organizations, to improve teaching and learning;
- Promoting internal workshops and brainstorming with personnel from different departments to co-create teaching tools, methodologies and techniques - collaborative production with the school's internal multidisciplinary team;
- Inviting an external group of diverse professionals (i.e. managers, artists, designers, doctors, philosophers, musicians, film directors, psychologists, etc.) to participate in brainstorming sessions to create new teaching tools, methodologies, techniques, paradigms etc. - Collaborative production with external multidisciplinary team of professionals who work in various areas;
- Incubating ed-tech startups within the Business School with the mission to develop innovative teaching tools, methodologies and techniques - collaborative production with ed-techs that design and offer technology solutions for education;
- Stimulating teachers from different areas (i.e. Business and Art) to work together to create new and effective teaching tools, methodologies and techniques - collaborative production with multidisciplinary team of school teachers;

- Learning from areas beyond business education such as the entertainment industry - creating educational solutions inspired by other areas of knowledge and culture;
- Investing continuously in new technologies (i.e. 3D learning, robots, FabLabs) - creation of educational solutions by adopting immersive and analytical technologies and methodologies;
- Training teachers to develop new methodologies and techniques for online education using technologies that are available at the Business or Executive Business School - teacher development to take advantage of available technological resources avaliable in the school.
- Conducting applied research in the areas of online learning – using theoretical and empirical investigation of internal and external school practices related to online education;
- Using Data Science to understand online student experiences – using computational data for decision-making regarding the participant experience.

Learning and product/service innovation is intrinsically connected with the other elements of pedagogical innovation. The ways to innovate in this process include Faculty Development, the choice and adoption, or not, of digital technologies, the appropriation of learning design knowledge by all stakeholders responsible for participating and contributing to the learning innovation process, the mapping of what is being done in other schools, and prospecting for future scenarios. This innovation is increasingly driven by the results of the process and the positive experience of stakeholders participating in the activities of various areas of a business school.

2.5 Executive mapping education trends

The market offers many different types of executive education, which can vary greatly in title, description, duration, accreditation, content, focus, methodologies etc. However, all of

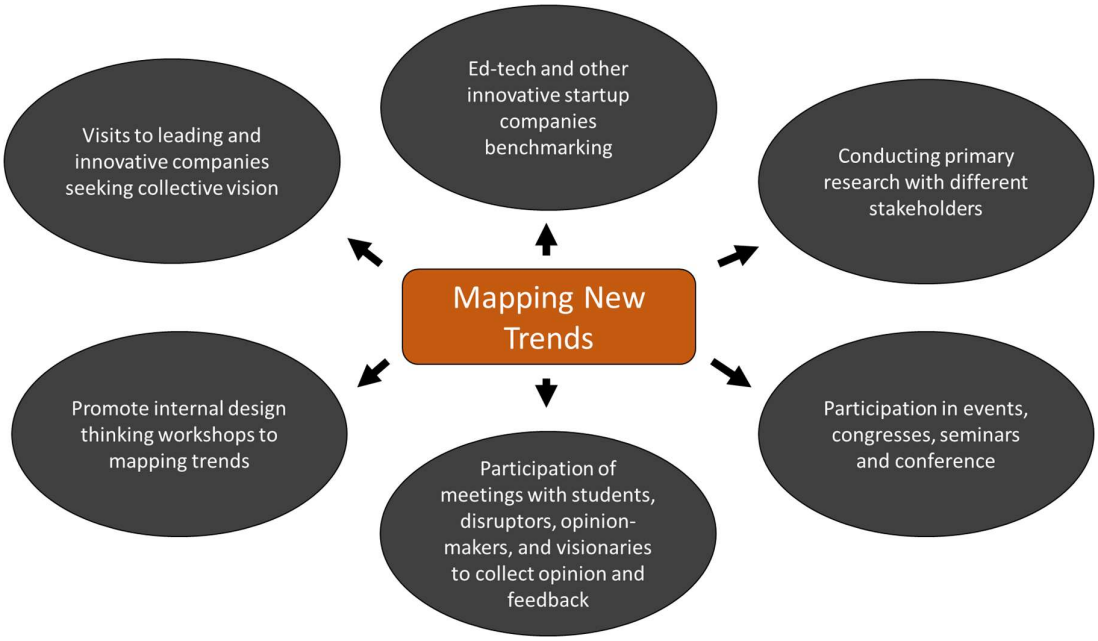
these offerings present a common challenge (especially to those designing them): what is the likelihood of their success (McCarthy, Sammon & O'Raghallaigh, 2016).

We know that major Business Schools are built around current research and trends in management. But how does one design a portfolio for executives in search of cutting-edge knowledge and perspectives, as well as the best practices and emerging issues in the business world? How exactly do Business Schools understand their client's business objectives and transform these into a custom designed or open enrollment program? How do they map current trending topics, content, impactful learning methods, tools to design new programs, develop and enhance essential new executive competencies? Where do inputs or inspirations for new programs come from?

Designing an executive education program is a difficult undertaking. McCarthy, Sammon and O'Raghallaigh (2016) reinforce that, from previous studies, it appears as if there is a hesitancy to outline a model for executive education program design. Despite previous literature discussing aspects of design for executive education programs, namely, partnerships, accreditation, learning outcomes and curriculum, there is an absence of convergence around these key elements of design.

For this study we identified some practices the Business Schools may implement to map current trending topics, content, impactful learning methods, tools, which can be seen in Figure 4.

Figure 4
Practices in Mapping New Trends



Source: Framework proposed to the research on mapping trends. Adapted from McCarthy, Sammon & O'Raghallaigh, 2016.

Although we know that trend mapping can be complex and multifaceted, we sought to verify actions that could be taken to a certain degree by institutions in order to map trends. The transition from practice to action was performed from the drivers presented in Figure 1 and are detailed below:

- Conducting primary research with different stakeholders - doing primary research and studies with current clients, potential clients, non-clients, educators, companies, visionaries, other higher learning institutions, market consultants, other researchers, etc.;
- Participating on events, congresses, seminars and conferences - participates or publishes results of studies, papers and articles at conferences, seminars, round tables, discussion groups or even in internal road shows;
- Participating in meetings with students, disruptors, opinion-makers, and visionaries to collect their opinion and feedback - these participants are reliable sources of

information about the teaching quality, and one of the most useful sources of ideas on how to improve it;

- Promoting internal design thinking workshops to map trends – promoting internal design thinking workshops involving students, faculty, stakeholders, companies, startups, market associations etc. to discuss the future of education. This emerging culture of design prioritizes people experience and point of views, while mobilizing its own highly flexible creative and innovative methods that are visual and participatory in nature to be more empathetic and communicative. The designers should also maintain a holistic perspective in terms of the whole experience and of the effect of the product or the service they develop on society[4].
- Visiting to leading and innovative companies seeking collective vision – visiting incubators and think-tanks to direct future education design, processes, methodologies and thinking (i.e. Silicon Valley), to consider a new collective vision for education to attempt to understand what happens next;
- Benchmarking ed-techs and other innovative startup companies – benchmark and technical visits to ed-techs and other startups, innovative and state-of-the art companies.

Mapping recent trends in new issues and topics, content, pedagogical approaches and learning technologies, is the first step to try to offer a consistent, significant and impacting new program.

[4] Çeviker-Çınar, G., Gökhan, M., & Kaplan, M-D. (2017). Design thinking: A new road map in business education. The Design Journal, S977-S987. doi:10.1080/14606925.2017.1353042.20.supp.

2.6 Overall participant learning experience

In a world where products and services are plentiful and companies are fighting for attention and position in the marketplace, a good and efficient client strategy becomes a strategic competitive advantage (Watts, 2019). Companies from different sectors have been recognizing the importance of delivering a rich client experience to differentiate themselves from the competition.

Word of mouth plays a big part in the marketing of any product and education is no different. If participants/students do not have a positive and enjoyable experience, which they believe meets their needs and offers value for their money, a college or university is likely to notice a fall in applicants, as well as reputation (Stubbs, 2013).

Client experience or more specific, participant learning experience, affects the schools business performance, creating a unique, sustainable competitive advantage. In this sense, many Business Schools have started looking at the overall journey or learning experience of its participants and searching for new and innovative ways to improve each touch point to deliver impactful interventions by enhancing experience and standing out from the competition.

But what makes a learning experience great? And what could be done at each key stage of the learning process to enhance the experience for learners?

The answers to these questions are not so simple and involve looking at the learning process from a broad and systematic view since it should provide life-changing learning experiences to allow individuals to have a real impact in their life and work. This means considering various aspects such as teaching itself, interactions with faculty and other participants, methodologies and activities employed, digital technologies, learning and program evaluation, the experience lived in the physical and digital spaces of the school, among others. In recent years, there has been a lot of discussion in terms of the actual learning experience and the elements that make a learning program successful (McCalpin, 2018). The growing use of the term learning experience by educators and others reflects larger pedagogical and technological shifts that have occurred in the design and delivery of education to

participants, and it most likely represents an attempt to update concepts of how, when, and where learning does and can take place.

New technologies, for example have multiplied and diversified the ways in which participants can learn from and interact with educators, in addition to the level of independence they may have when learning. Students can chat, or have video conversations with teachers and exchange learning materials. They can use apps and educational games to learn on their own time and without instruction or supervision from teachers. They can also conduct online research to learn more about a concept taught in a class, or use tablets to record observations in a natural environment - among countless other possible options and scenarios. While listening to a lecture, reading a book, or working in a project "out-of-class" remain "learning experiences". Participants are now learning in different ways than they have in the past and in a wider variety of outside-of-school settings (The Glossary of Education Reform, 2013).

The number of schools that are investing time and resources on the participant learning experience is growing fast. Some excellent Business Schools have their learning approach based on learn-by-doing, using a mix of learning methodologies and bringing each student together with participants from around the world, immersing in real business challenges under the guidance of experienced faculty. The experience is being carefully orchestrated by these Business Schools to determine gaps and shortcomings, helping to create a more engaging experience for their clients.

Some practices and actions can be employed by Business Schools to map and promote relevant and meaningful learning experiences, such as:

- Mapping the learning needs and competencies to be developed by the participants - knowledge of the executive expectations regarding the type of training, knowledge and outcomes they wish to achieve by participating in a program offered by the business school;
- Surveying participant prior knowledge about the contents addressed in the program - application of diagnostic assessment tools to map previous knowledge of program

participants, which may support adjustments in previously elaborated pedagogical models;

- Using learning strategies to align program learning objectives - selecting strategies, methods and activities consistent with the proposed learning objectives for each moment of the program;
- Evaluating the program proposal - surveying whether program execution met expectations created from the disclosed program proposal. That is, verification of what was promised to the participant in the sale of the educational solution was delivered in their participant learning experience;
- Interacting with other program participants and collaborative learning - enabling executives to interact, collaborate and learn from the experiences of other program participants;
- Using technologies to support meaningful (or relevant) learning experiences - adoption of technologies to enhance learning experiences by being linked to learning objective;
- Evaluating participant satisfaction of the learning experience at the end of the program - survey of participant's satisfaction with the teaching, learning and evaluation process of the program as a whole;
- Mapping if the participant would recommend the program to others - indication if the participant would recommend the program to co-workers, family, friends or people from their professional network.

Finally, it is important to highlight that the participant learning experience is a multifaceted experience that includes unique features of engagement, curiosity and innovation along the way. To determine whether the training touch points have attained their intended effect, Business Schools should measure knowledge and behavior changes. For McCalpin (2018), this is the best way to measure progress, and progress translates into a great learning experience.

APPENDIX B – PHASE 1 QUESTIONNAIRE TEMPLATE

Qualitative Research With Business Schools

The objective of this research is to verify if the studied Business School institutions have a Pedagogy Department (PD) and if so, identify the contributions and values generated by the PD initiatives.

For this research, Pedagogy Department (PD) is defined as a catalyst for either innovation, development or modernization of executive education, defining learning methodologies and learning strategies for the business school, its faculty and its students.

A PD can include any of the following:

- A specific area, or department, or other departments, or a specific person that supports other areas of the Business School to design instructional educational methodologies and activities based on participant necessities and learning objectives. It can also include innovation regarding methodology and different learning processes, such as

digital education, case method, reverse learning, faculty development programs, and so on.

Part I – Mission and Statement

- Do you have, in your school, any department, area, or initiative similar to the definition presented? Please explain.
- What were the main factors that motivated a PD creation?
- When was the PD created and who was involved?
- Is there a clear mission statement for the PD? If yes, please specify.
- Does de PD only support executive education or does it also support faculty development for other programs in the school/university?
- What are the challenges faced by the PD?
- Does PD develop any of its own methodologies? If so, please list.

Part II – Activities and Structure

- What activities are covered by the PD?
- Could you describe the main activities of the PD?
- Cite some memorable projects that have been developed by the PD?
- How many and what types of people are directly involved in the PD? (employees, professors, assistants, postgrad students, etc.)

Part III – Value Creation

- How does the PD identify the current needs to develop and apply methodologies to improve the learning experience?
- Does faculty and participants perceive value in the PD initiatives?

- What is your perception, as a leader in your school's executive education area, of the value generated by the PD initiatives?
- How does your institution measure the PD effectiveness of the methodologies developed and results?
- What metrics are used to perform this measurement?
- What could PD be doing to maximize educational development value?

APPENDIX C – PHASE 2 QUESTIONNAIRE TEMPLATE

RESEARCH SUPPORT INSTRUMENT

The objective of this research project is to identify the progressive and productive practices used by top Business Schools for executive education that develop significant activities for faculty development, learning innovation, learning design, product/service innovation, digital culture, executive education mapping trends, and overall participant experience. This project will be an important contribution and useful tool for UNICON Business School members.

The respondents of this questionnaire should be the Dean, Manager or Head of the Executive Education Area, Learning and Teaching Innovation Department or the Pedagogy Department.

This questionnaire is an instrument that will help us raise questions about the research topic. Thank you for your participation!

A) CHARACTERIZATION: UNDERSTANDING WHAT YOUR BUSINESS SCHOOL HAS?

1. Some Executive Business Schools have a specific area, department, or a dedicated design team that supports other areas of the Business School to design instructional education methodologies and activities based on participant necessities and learning objectives. It can also include faculty development programs, innovation regarding methodology and different learning processes, such as digital education, design in-company programs and so on. Please answer:

    a) What does your Executive Business School have?
    b) How does it operate?
    c) When was it created?
    d) What is the mission statement for it?
    e) How many and who are the people working in the area or department or a dedicate design team?
    f) What were the main factors that motivated the creation of it?
    g) What are the advantages in having it?

h) What are the challenges faced by the area or department or this dedicate design team?

B) PRACTICES AND PERCEIVED VALUE

2. List the practices and activities used by your Business School for faculty development, learning innovation, learning design, product/service innovation, digital culture, executive mapping education trends, and overall participant experience:
   a) Faculty development
   b) Learning innovation
   c) Learning design
   d) Product/service innovation
   e) Digital culture
   f) Executive education mapping trends
   g) Participant experience

3. Regarding the education practices covered by the department or specific professionals in your institution, classify the statements below, considering: 5- very often or always; 4-often; 3-sometimes; 2-rarely; 1-very rarely or never

THE EDUCATIONAL PRACTICES COVERED ARE...	1	2	3	4	5
Promote the training and continuous professional development of the executive education faculty					
Develop effective and innovative teaching tools, methodologies and techniques					
Design and deliver programs emphasizing learning design					
Promote innovation in educational products/ programs/curriculums					
Support other areas with digital learning to embrace technology trends and maximize the learning outcomes of the programs					
Identify and address the trends that will drive transformation of executive education in the future activating change necessary for tomorrow`s learning and teaching environment					
Support overall participant experience					

4. Are there any other educational practices not listed above that are related to faculty development, learning innovation, learning design, product/service innovation, digital culture, executive mapping education trends, and overall experience in your institution?

( ) No

( ) Yes: _____

5. Considering the **FACULTY DEVELOPMENT,** what does your Business School do? Classify the statements below, considering: 5- very often or always; 4-often; 3-sometimes; 2-rarely; 1-very rarely or never:

	1	2	3	4	5
Develops formal programs, providing an opportunity for faculty to see themselves in action, experience learning activities and teaching techniques					
Encourages faculty to watch others teaching					
Encourages faculty to participate in open-enrollment programs – as a participant – for content knowledge enhancement					
Encourages faculty to ask others to watch them teaching and give them feedback					
Encourages faculty to find a mentor who advise, explore teaching ideas and share teaching material					
Encourages faculty to work with a specialized coach					
Encourages faculty to shadow a manager, to understand the problems and challenges facing managers					
Encourages faculty to attend conferences focused on practical problems in their areas of expertise					
Encourages faculty to gain experience with executives by doing consulting or putting in practice what they teach					
Other: _____					

6. Considering the **LEARNING INNOVATION PROCESS** (innovation in teaching tools, methodologies and techniques), what does your Business School do? Classify the statements below, considering: 5- very often or always; 4-often; 3-sometimes; 2-rarely; 1-very rarely or never:

	1	2	3	4	5
Promotes formal events that allow a strong connection between the Business School and companies (clients) for the continuing exchange of experiences and learning					
Identifies opportunities in the market (potential education suppliers) for purchase, partnership or development of new methodologies and technologies					
Participates in workshops or courses that discuss specifically innovative methods and tools that can be adapted in any executive education reality					

	1	2	3	4	5
Establishes partnerships with product and service suppliers, in order to have the most competitive LMSs, plugins, and technologies that measure learning					
Participates in workshops, courses or immersion programs inspiring development of innovative teaching tools, methodologies and techniques					
Exchanges teaching methods between a partner institution and developing joint teaching materials					
Promotes workshops with the alumni and current students in order to co-create teaching methods, techniques and tools					
Promotes internal workshops and brainstorming with personnel of different departments to co-create teaching tools, methodologies and techniques					
Invites an external group of diverse professionals (e.g. managers, artists, designers, doctors, philosophers, musicians, film directors, psychologists, etc.) to participate in brainstorming sessions to create new teaching tools, methodologies, techniques, paradigms etc.					
Incubates edtech startups within the Business School with the mission to develop innovative teaching tools, methodologies and techniques					
Stimulates professors from different areas (e.g Business and Art) to work together to create new and effective teaching tools, methodologies and techniques					
Other: _____					

7) Considering the LEARNING DESIGN PROCESS (innovation in teaching tools, methodologies and techniques), does your Business School have its own methods to design it programs or the institution adopts consolidated methods, as ADDIE (Analyse, Design, Develop, Implement, Evaluate)? Explain it.

8) Considering the **LEARNING INNOVATION PROCESS** (innovation in teaching tools, methodologies and techniques) in **ONLINE EDUCATION ENVIRONMENTS,** what does your Business School do? Classify the statements below, considering: 5- very often or always; 4-often; 3-sometimes; 2-rarely; 1-very rarely or never

	1	2	3	4	5
Trains teachers to develop new methodologies and techniques for online education using technologies that are available at the Business or Executive Business School					
Promotes events that allow a strong connection between the Business School and the companies/clients for the continuing exchange of experiences and learning					
Identifies opportunities in the market for purchase, partnership or development of methodologies and technologies					

	1	2	3	4	5
Establishes partnerships with product and service suppliers, in order to have the most competitive LMSs, plugins, and technologies that measure learning, giving teachers a wider spectrum of possibilities to innovate in methodology					
Establishes partnerships with suppliers in order to offer Artificial Intelligence and Machine Learning supporting methodologies adopted by Business School teachers					
Develops or acquiring simulation tools					
Conducts applied research in the areas of online learning					
Uses the services of an internal team of instructional designers					
Uses the services of an external team of instructional designers					
Uses Data Science to understand online experiences of the students					
Other: _____					

9) Considering the **LEARNING DESIGN PROCESS,** what does your Business School do? Classify the statements below, considering: 5- very often or always; 4-often; 3-sometimes; 2-rarely; 1-very rarely or never:

	1	2	3	4	5
Hires high level professionals (senior Project Directors or similar professionals) with practical experience and experts in learning methodology that can design and deliver high performance programs					
Promotes internal workshops conducted by specialists in educational design to train Project Directors (or similar professionals), by presenting new tools and methodologies that can help them to impact the overall client experience					
Considers the curricular principles of the institution as a whole (e.g. student-centered learning, autonomy, meaningful learning, active and collaborative learning)					
Mobilizes interdisciplinary teams					
Creates new programs based on educational trends and research results					
Develops prototypes and applying to test groups					
Predicts diverse learning assessment strategies					
Considers the alignment between content, methodology, technology and organizational aspects of the institution					

	1	2	3	4	5
Develops programs under institutional demands					
Improve the developed programs based on feedback from the institution, students and teachers					
Other: _____					

10) Considering the **PRODUCT/SERVICE INNOVATION PROCESS** (innovation in educational products/programs/curriculums), what does your Business School do? Classify the statements below, considering: 5- very often or always; 4-often; 3-sometimes; 2-rarely; 1-very rarely or never:

	1	2	3	4	5
Actively suggests new products/programs/curricula changes (e.g. courses for individuals or companies)					
Stimulates other areas to suggest new products/programs by organizing and promoting specific events (meetings, seminars, inviting new and innovative startups, etc.)					
Incentives individual faculty innovations that are successful in specific courses/classes to other faculty members					
Learns and shares experiences with other institutions					
Learns from areas beyond business education such as the entertainment industry					
Promotes artistic expressions and languages to stimulate creativity and innovation					
Uses learning-from-your-mistakes methodologies					
Invests continuously in new technologies (e.g. 3D learning, robots, FabLabs)					
Other: _____					

11) Considering the **DIGITAL CULTURE,** what does your Business School do? Classify the statements below, considering: 5- very often or always; 4-often; 3-sometimes; 2-rarely; 1-very rarely or never:

	1	2	3	4	5
Trains teachers and course managers to make the best use of available technology					
Produces digital content, materials and resources to enhance learning					
Establishes and using metrics to understand the effects to justify the use of digital technologies					
Makes available the latest technologies and digital content to achieve learning objectives					
Promotes a digital culture in the institution					
Supports services and provides platforms to improve teaching and learning through effective use of technology					
Other: _____					

12) Considering the **MAPPING TRENDS**, what does your Business School do? Classify the statement below, considering: 5- very often or always; 4-often; 3-sometimes; 2-rarely; 1-very rarely or never:

	1	2	3	4	5
Does primary research and studies with current clients, potential clients, non-clients, educators, companies, visionaries, other higher learning institutions, market consultants, other researchers, etc.					
Participates or publishes and presents results of studies, papers and articles at conferences, seminars, round tables, discussion groups or even in internal road shows					
Participates in meetings with students, disruptors, opinion-makers, and visionaries to be exposed to the challenges and opportunities facing those who are transforming what "school" and "learning" mean					
Promotes internal workshops involving students, faculty, stakeholders, companies, startups, market associations etc. to discuss the future of education					
Visits incubators and think-tanks to direct future education design, processes, methodologies and thinking (e.g. Silicon Valley), to consider a new collective vision for education to attempt to understand what happens next					
Benchmarks and technical visits to startups, innovative and state-of-the art companies					
Other: _____					

13) Considering the **PARTICIPANT EXPERIENCE**, what does your Business School do? Classify the statement below, considering: 5- very often or always; 4-often; 3-sometimes; 2-rarely; 1-very rarely or never:

	1	2	3	4	5
Maps the learning needs and competencies to be developed by the participants					
Surveys of participants' prior knowledge about the contents addressed in the program					
Uses learning strategies to align program learning objectives					
Evaluates of the program proposal					
Interacts with other program participants and collaborative learning					
Uses of technologies to support meaningful (or relevant) learning experiences					
Evaluates of participant satisfaction of the learning experience at the end of the program					
Maps if the participant would recommend the program to others					

Other: _____					

14) How does the Business School identify the current needs to develop and apply methodologies to improve the learning experience? (order by relevance: 1 for the most relevant, 2 for the second and so on. Rank only the items that apply)

( ) Direct observation

( ) Participant feedback

( ) Client feedback

( ) Other stakeholder feedback (e.g. the operations and logistics teams, etc.)

( ) External benchmarking

( ) Research and studies conducted by the department or by the responsible professionals (radar approach)

( ) Being in touch with the programs and faculty and having a request emerge from those (bottom up approach)

( ) Other: _____

15) How does your institution measure the effectiveness of the methodologies developed by the department or responsible professionals and their results?

( ) Qualitative measures:

- ( ) Direct observation
- ( ) Participant feedback
- ( ) Client feedback
- ( ) Other: _____

( ) Quantitative measures

- ( ) Kirkpatrick's multi-level model
  - ( ) Just Level I
  - ( ) Level I all of the time, and level's II and beyond in select instances
  - ( ) Other: _____
- ( ) Other measure model: _____

16) Evaluate the statements below, considering**:** 5 - strongly agree; 4-agree; 3-neither agree or disagree; 2-disagree; 1-strongly disagree

	1	2	3	4	5
a) The department responsible for faculty development, learning innovation, learning design, product/service innovation, digital culture, executive education mapping trends, and overall experience is a coordinating mechanism for the Business School to innovate with respect to the practice of teaching and learning					
b) The most important mission statement of this department is creating exceptional professional development offerings					
c) For a Business School, specifically those having an executive education area, it is indispensable to have a department responsible for innovation and teacher training					
d) The people that work at this Department/Area have clear understanding of the scope of their work					
e) People from other departments have clear understanding of the scope of this department/area work					
f) Faculty perceives value of this department/area initiatives					
g) Executive Education Administration perceives value in this Department/Area initiatives					
h) Other departments of the Business School perceive value in this department/area initiatives					
i) To work in this area, personnel must have both high professional and academic qualifications					
j) The L&TID and/or PD must conduct at least one survey with potential clients per year to identify learner needs and market demands					
k) Usually the program directors and academic directors are very receptive with the redesign of his/her programs proposed by the L&TID and/or PD, because they know that competitiveness of their program is important					
l) The Board of the Business School must support the L&TID and/or PD program redesign proposals for across the board acceptance					
m) The L&TID and/or PD must have a variety of initiatives to inspire curricular innovation					
n) The L&TID and/or PD have autonomy to propose program redesign for program directors and academic directors without prior Board approval					
o) The L&TID and/or PD must have a variety of initiatives to inspire faculty development					
p) The L&TID and/or PD don't need to measure it effectiveness quantitatively					

17) Cite a memorable project(s) that have been developed by this department/area.

_____

_____

_____

_____

18) What could the department/area be doing to maximize education development value?

_____

_____

_____

_____

19) What educational strategies are adopted in your institution? Use: 5- very often or always; 4-often; 3-sometimes; 2-rarely; 1-very rarely or never

	1	2	3	4	5
Hybrid education (mixing classroom and online environments)					
Individual coaching					
Group coaching					
Mentoring					
Learning 70-20-10 (on the job, training and peer learning)					
Personalized learning (flexible learning - each participant chooses their learning journey, taking into account individual characteristics and interests)					
Use of active methodologies (Problem Based Learning; Team Based Learning)					
Use of agile methodologies (Elevator pitch; Minute paper)					
Cases Studies (Harvard, Company Cases, Benchmarking Cases of other companies, etc.)					
Mobile learning (training via mobile devices, such as tablets and smartphones)					
Video learning (learning through videos, enabling a combination of different resources and stimuli such as images, sounds, scripts, characters, animations, interactivity, etc.					
Business games (computer simulations, involving group decision-making)					
Gamification (use of techniques, strategies and game design in educational programs)					
Makerspaces (Labs - creative spaces for exploration, construction, experimentation and collaborative and collective learning)					
Microlearning (content pills or short videos, focusing on specific knowledge)					
Project-based teaching workshops (applied projects, in which participants choose a topic, conduct research, record data, formulate hypotheses, and become subjects of their own knowledge)					
Digital Storytelling (presentation of content through the art of storytelling with a variety of digital media)					
Immersion learning (virtual reality through portable and wearable devices)					
Big Data, Machine Learning and Deep Learning (concepts and methods that contribute to personalized learning)					

C) BUSINESS SCHOOL CHARACTERIZATION AND THE EXECUTIVE EDUCATION AREA

1. Name of the Institution: _____

2. Country of the Institution: _____

3. Year of the Business School's foundation: _____

4. Which kind of programs below do you have in your Business School?
   ( ) Undergraduate programs
   ( ) MBA (Master in Business Administration)
   ( ) EMBA (Executive Master in Business Administration)
   ( ) Open Courses (Programs for individuals)
   ( ) Corporate Education (customized programs – Programs for Organizations)
   ( ) Others: _____

5. Estimated number of students in the Business School: _____

6. Estimated number of students in the Executive Education Area: _____

7. Estimated number of Executive Education professors:
   - Full time Professors: ( ) 1-20; ( ) 21-40; ( ) 41-60; ( ) 61-90 ( ) over 91
   - Associate Professors: ( ) 1-20; ( ) 21-40; ( ) 41-60; ( ) 61-90 ( ) over 91
   - Assistant Professors: ( ) 1-20; ( ) 21-40; ( ) 41-60; ( ) 61-90 ( ) over 91
   - Practitioners as lecturers (practice professors): ( ) 1-20; ( ) 21-40; ( ) 41-60; ( ) 61-90 ( ) over 91

8. You respondent are:
   ( ) The Dean of the Executive Education Area
   ( ) The Dean of the Learning and Teaching Innovation Department
   ( ) The Dean of the Pedagogy Department
   ( ) Other: _____

APPENDIX D – TABLES OF EXECUTIVE BUSINESS SCHOOLS AND ITS PEDAGOGICAL DEPARTMENTS

Table 14

Education practices covered by the department or specific professionals

Actions	SCHOOL H	SCHOOL I	SCHOOL J	SCHOOL K	AVERAGE
Design and deliver programs emphasizing learning design	3	5	5	5	**4,50**
Support overall participant experience	4	5	5	4	**4,50**
Promote innovation in educational products/ programs/curriculums	4	5	4	4	**4,25**
Develop effective and innovative teaching tools, methodologies and techniques	3	4,5	5	4	**4,13**
Support other areas with digital learning to embrace technology trends and maximize the learning outcomes of the programs	4	5	4	3	**4,00**
Promote training and continuous professional development of the executive education faculty	3	4	4	4	**3,75**
Identify and address the trends that will drive transformation of executive education in the future activating change necessary for tomorrow`s learning and teaching environment	4	4	4	3	**3,75**
Average	**3,57**	**4,64**	**4,43**	**3,86**	

Source: Data from the second phase of the research.

Table 15

Practices for Faculty Development

Actions	SCHOOL H	SCHOOL I	SCHOOL J	SCHOOL K	AVERAGE
Encourages faculty to watch others teaching	4	5	5	5	**4,75**
Encourages faculty to participate in open-enrollment programs – as a participant – for content knowledge enhancement	4	5	5	5	**4,75**
Encourages faculty to ask others to watch them teaching and give them feedback	3	5	5	5	**4,50**
Encourages faculty to gain experience with executives by doing consulting or putting into practice what they teach	4	5	5	3	**4,25**
Develops formal programs, providing an opportunity for faculty to see themselves in action, experience learning activities and teaching techniques	3	4	4	5	**4,00**
Encourages faculty to find a mentor who advises, explores teaching ideas and shares teaching material	2	5	5	4	**4,00**
Encourages faculty to work with a specialized coach	4	5	3	3	**3,75**
Encourages faculty to attend conferences focused on practical problems in their areas of expertise	4	5	3	3	**3,75**
Encourages faculty to shadow a manager, to understand the problems and challenges facing managers	2	5	3	4	**3,50**
AVERAGE	**3,33**	**4,89**	**4,22**	**4,11**	**4,14**

Source: Data from the second phase of the research.

Table 16

Practices oriented to Learning Innovation

Actions	SCHOOL H	SCHOOL I	SCHOOL J	SCHOOL K	AVERAGE

Actively suggests new products/programs/curriculum changes (e.g. courses for individuals or companies)	5	5	5	5	**5**
Promotes formal events that allow a strong connection between the Business School and companies (clients) for the continuing exchange of experiences and learning	3	5	5	5	**4,5**
Invests continuously in new technologies (e.g. 3D learning, robots, FabLabs)	N/A	4	4	5	**4,33**
Stimulates professors from different areas (i.e. Business and Art) to work together to create new and effective teaching tools, methodologies and techniques	5	4	5	3	**4,25**
Participates in workshops, courses or immersion programs inspiring development of innovative teaching tools, methodologies and techniques	3	4	5	4	**4**
Exchanges teaching methods between a partner institution and developing joint teaching materials	3	3	5	5	**4**
Identifies opportunities in the market for purchase, partnership or development of methodologies and technologies	3	5	4	3	**3,75**
Establishes partnerships with product and service suppliers, in order to have the most competitive LMSs, plugins, and technologies that measure learning, giving teachers a wider spectrum of possibilities to innovate in methodology	2	5	5	3	**3,75**
Promotes internal workshops and brainstorming with personnel of different departments to co-create teaching tools, methodologies and techniques	3	5	4	2	**3,5**
Learns from areas beyond business education such as the entertainment industry	5	3	3	3	**3,5**
Trains teachers to develop new methodologies and techniques for online education using technologies that are available at the Business or Executive Business School	2	5	5	2	**3,5**

Establishes partnerships with suppliers in order to offer Artificial Intelligence and Machine Learning supporting methodologies adopted by Executive Education Business School teachers	1	4	4	3	**3**
Promotes workshops with the alumni and current students in order to co-create teaching methods, techniques and tools	2	3	4	3	**3**
Conducts applied research in the areas of online learning	1	4	4	2	**2,75**
Invites an external group of diverse professionals (e.g. managers, artists, designers, doctors, philosophers, musicians, film directors, psychologists, etc.) to participate in brainstorming sessions to create new teaching tools, methodologies, techniques, paradigms etc.	2	3	2	3	**2,5**
Incubates ed-tech startups within the Business School with the mission to develop innovative teaching tools, methodologies and techniques	3	4	2	1	**2,5**
Uses Data Science to understand online experiences of the students	1	3	3	3	**2,5**
AVERAGE	**2,75**	**4,06**	**4,06**	**3,24**	**3,55**

Source: Data from the second phase of the research.

Table 17

Practices oriented to Learning Design

Actions	SCHOOL H	SCHOOL I	SCHOOL J	SCHOOL K	AVERAGE
Considers the curricular principles of the institution as a whole (i.e.. student-centered learning, autonomy, meaningful learning, active and collaborative learning)	5	5	5	5	**5,00**
Improve the developed programs based on feedback from the institution, students and teachers	5	5	5	5	**5,00**
Mobilizes interdisciplinary teams	5	5	5	5	**5,00**
Develops prototypes and applying to test groups	5	4	5	5	**4,75**

Creates new programs based on educational trends and research results	4	5	5	4	**4,50**
Considers the alignment between content, methodology, technology and organizational aspects of the institution	4	4	5	5	**4,50**
Develops programs under institutional demands	5	4	4	5	**4,50**
Predicts diverse learning assessment strategies	4	3	5	5	**4,25**
Hires high level professionals (senior Project Directors or similar professionals) with practical experience and experts in learning methodology that can design and deliver high performance programs	3	4,5	5	4	**4,13**
Promotes internal workshops conducted by specialists in educational design to train Project Directors (or similar professionals), by presenting new tools and methodologies that can help them to impact the overall client experience	2	5	4	4	**3,75**
AVERAGE	**4,2**	**4,45**	**4,8**	**4,7**	**4,54**

Source: Data from the second phase of the research.

Table 18

Practices oriented to Digital Culture

Actions	SCHOOL H	SCHOOL I	SCHOOL J	SCHOOL K	AVERAGE
Produces digital content, materials and resources to enhance learning	3	5	5	5	**4,5**
Trains teachers and course managers to make the best use of available technology	2	5	5	3	**3,75**
Makes available the latest technologies and digital content to achieve learning objectives	2	5	4	3	**3,5**
Supports services and provides platforms to improve teaching and learning through effective use of technology	3	5	4	2	**3,5**
Promotes a digital culture in the institution	2	4	5	2	**3,25**

Establishes and using metrics to understand the effects to justify the use of digital technologies	1	2	5	3	**2,75**
AVERAGE	**2,17**	**4,33**	**4,67**	**3,00**	**3,54**

Source: Data from the second phase of the research.

Table 19

Practices oriented to Executive Education Mapping trends

Actions	ITAM	IMD	INCAE	INSPER	AVERAGE
Does primary research and studies with current clients, potential clients, non-clients, educators, companies, visionaries, other higher learning institutions, market consultants, other researchers, etc.	4	4	5	5	**4,5**
Participates or publishes and presents results of studies, papers and articles at conferences, seminars, round tables, discussion groups or even in internal road shows	5	3	5	4	**4,25**
Participates in meetings with students, disruptors, opinion-makers, and visionaries to be exposed to the challenges and opportunities facing those who are transforming what "school" and "learning" mean	3	4	5	5	**4,25**
Promotes internal workshops involving students, faculty, stakeholders, companies, startups, market associations etc. to discuss the future of education	4	4	4	5	**4,25**
Visits incubators and think-tanks to direct future education design, processes, methodologies and thinking (e.g. Silicon Valley), to consider a new collective vision for education to attempt to understand what happens next	4	2	5	2	**3,25**
Benchmarks and technical visits to startups, innovative and state-of-the art companies	2	3	5	2	**3**
AVERAGE	**3,67**	**3,33**	**4,83**	**3,83**	**3,92**

Source: Data from the second phase of the research.

Table 20

Practices oriented to Participant Learning Experience

Actions	ITAM	IMD	INCAE	INSPER	AVERAGE
Maps the learning needs and competencies to be developed by the participants	4	4	5	5	**4,5**
Surveys of participants' prior knowledge about the contents addressed in the program	4	4	"Yes, this is part of the pre-program."	5	**4,33**
Uses learning strategies to align program learning objectives	3	4	5	5	**4,25**
Evaluates of the program proposal	4	5	5	5	**4,75**
Interacts with other program participants and collaborative learning	4	4	5	5	**4,5**
Uses of technologies to support meaningful (or relevant) learning experiences	2	5	5	5	**4,25**
Evaluates of participant satisfaction of the learning experience at the end of the program	5	5	5	5	**5**
Maps if the participant would recommend the program to others	4	5	5	5	**4,75**
AVERAGE	**3,75**	**4,5**	**5**	**5**	**4,54**

Source: Data from the second phase of the research.

Table 21

Dimensions of pedagogical innovation and its scores by school

Dimension	SCHOOL H	SCHOOL I	SCHOOL J	SCHOOL K	AVERAGE
Learning Design	4,2	4,45	4,8	4,7	**4,54**
Participant Experience	3,75	4,50	5,00	5,00	**4,54**
Faculty Development	3,33	4,89	4,22	4,11	**4,14**
Mapping Trends	3,67	3,33	4,83	3,83	**3,92**

Digital Culture	2,17	4,33	4,67	3,00	**3,54**
Learning Innovation	2,75	4,06	4,06	3,24	**3,53**
AVERAGE	**3,31**	**4,26**	**4,59**	**3,98**	**4,03**

Source: Data from the second phase of the research.

Table 22

Practices and roles of the PD

Actions	SCHOOL H	SCHOOL I	SCHOOL J	SCHOOL K	AVERAGE
The department responsible for faculty development, learning innovation, learning design, product/service innovation, digital culture, executive education mapping trends, and overall experience is a coordinating mechanism for the Business School to innovate with respect to the practice of teaching and learning	5	5	5	5	**5**
To work in this area, personnel must have both high professional and academic qualifications	5	5	5	5	**5**
The PD must have a variety of initiatives to inspire curricular innovation	5	5	5	4	**4,75**
The most important mission statement of this department is creating exceptional professional development offerings	4	1	4	5	**3,5**
For a Business School, specifically those having an executive education area, it is indispensable to have a department responsible for innovation and teacher training	4	5	5	5	**4,75**
The people that work at this Department/Area have clear understanding of the scope of their work	5	4	5	5	**4,75**
Executive Education Administration perceives value in this Department/Area initiatives	5	4	5	5	**4,75**
Faculty perceives value of this department/area initiatives	5	3	5	5	**4,5**
Other departments of the Business School perceive value in this department/area initiatives	5	4	4	5	**4,5**

The PD must have a variety of initiatives to inspire faculty development	5	4	5	4	**4,5**
People from other departments have clear understanding of the scope of this department/area work	4	3	5	4	**4**
The PD must conduct at least one survey with potential clients per year to identify learner needs and market demands	5	2	4	4	**3,75**
The Board of the Business School must support PD program redesign proposals for across the board acceptance	1	5	3	4	**3,25**
The PD has autonomy to propose program redesign for program directors and academic directors without prior Board approval	5	1	5	2	**3,25**
Usually the program directors and academic directors are very receptive with the redesign of his/her programs proposed by the PD - they know that competitiveness of their program is important	4	2	4	2	**3**
The PD does not need to measure its effectiveness quantitatively	4	2	2	2	**2,5**
AVERAGE	4,44	3,44	4,44	4,13	**4,11**

Source: Data from the second phase of the research.

Table 23

Learning strategies used

Learning Strategies	SCHOOL H	SCHOOL I	SCHOOL J	SCHOOL K	AVERAGE
Learning 70-20-10 (on the job, training and peer learning)	4	4	5	5	**4,5**
Cases Studies (Harvard, Company Cases, Benchmarking Cases of other companies, etc.)	4	4	5	5	**4,5**
Project-based teaching workshops (applied projects, in which participants choose a topic, conduct research, record data, formulate hypotheses, and become subjects of their own knowledge)	4	5	4	5	**4,5**
Individual coaching	3	5	4	5	**4,25**

Use of active methodologies (Problem Based Learning; Team Based Learning)	4	3	5	5	**4,25**
Business games (computer simulations, involving group decision-making)	2	5	5	5	**4,25**
Video learning (learning through videos, enabling a combination of different resources and stimuli such as images, sounds, scripts, characters, animations, interactivity, etc.	3	5	4	4	**4**
Use of agile methodologies (Elevator pitch; Minute paper)	4	4	4	4	**4**
Group coaching	4	5	2	4	**3,75**
Hybrid education (mixing classroom and online environments)	3	5	4	3	**3,75**
Makerspaces (Labs - creative spaces for exploration, construction, experimentation and collaborative and collective learning)	2	5	3	5	**3,75**
Microlearning (content pills or short videos, focusing on specific knowledge)	3	5	4	3	**3,75**
Mentoring	2	4	4	4	**3,5**
Personalized learning (flexible learning - each participant chooses their learning journey, taking into account individual characteristics and interests)	2	3	5	2	**3**
Mobile learning (training via mobile devices, such as tablets and smartphones)	1	5	3	2	**2,75**
Digital Storytelling (presentation of content through the art of storytelling with a variety of digital media)	1	2	3	3	**2,25**
Gamification (use of techniques, strategies and game design in educational programs)	2	1	2	3	**2**
Big Data, Machine Learning and Deep Learning (concepts and methods that contribute to personalized learning)	2	3	2	1	**2**
Immersion learning (virtual reality through portable and wearable devices)	1	N/A	2	2	**1,67**
AVERAGE	**2,68**	**4,06**	**3,68**	**3,68**	**3,50**

Source: Data from the second phase of the research.