Make Meaning: An entrepreneurship course in an Industrial Engineering Program

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Abstract: This paper presents the lessons learned during the establishment of an entrepreneurship course of the “Curso de Especialização em Administração Industrial” (CEAI) offered by the Industrial Engineering Department of Escola Politécnica (Universidade de São Paulo, Brazil). One of the most traditional executive post graduation programs of Escola Politécnica, CEAI was established in 1978 and since then, more than 11,000 students have joined the program. Entrepreneurship: Development of a Business Plan is currently one of 40 courses of CEAI and it has been offered since 2003 as an elective course. The first two editions had neither caught major attention of students nor enthusiastic approval of those who attended them. After adjustments in teaching approach, content and students participation, this course has left the last positions among the available courses of CEAI and it has become one of the most popular and the best ranked in terms of student evaluation.

Keywords: entrepreneurship, teaching, methodology, restructuring

1. Introduction

Although entrepreneurship courses are quite popular and well established in universities in the United States (Katz 2003) and in some countries of Western Europe (Wilson 2004), they are relatively new in academic centers based in emerging countries. Basically, only in the last decade universities in emerging countries such as Brazil started to pay attention to entrepreneurship education. Indeed, this attention has been mainly concentrated in business-related majors.

Considering the general context of developing countries, the emergence of entrepreneurship education has taken place in a moment when entrepreneurship itself has emerged as a key issue in public policies (fiscal incentives, funding programs, bureaucracy optimization), regional development (industrial clusters, business incubators, technological parks, local seed capital initiatives) and in the public opinion (entrepreneurship as a career option, entrepreneurship prizes and awards, specialized media ventures).

In this context, many academic institutions have developed seminal initiatives in entrepreneurship education. The vast majority of these initiatives have started by launching a chair whose purpose is to write a business plan. Honig (2004) explains that the popularity of the business plan in entrepreneurship education has many reasons:

a) Its roots in strategic planning, which scholars feel comfortable to teach about;

b) It has a specific project-oriented output (business plan) that assists with student evaluation;

c) It has been legitimized by the literature, as a must have document for entrepreneurs.

As a result, business plan based courses have become the most popular curricula format in entrepreneurship education. Honig (2004) examined the 2004 college catalogs of the top 100 universities in the United States, and he found that 78 of them offered such courses,
in which business plan was typically identified as being the most important feature of the entrepreneurship course.

Despite the popularity of business plan writing courses, it is a myopia to approach business plan curricula as a definite entrepreneurship course. Although business plan can be part of an academic entrepreneurship program, they are not interchangeable. Honig (2004) alerts that business-planning education are more deeply rooted in ritual than in efficiency, particularly in the field of entrepreneurship. Entrepreneurship education cannot be reduced only to a course that explains how to write a business plan, he says.

Bearing in mind the limitations of business plan based courses, actually they have had a ground-breaking role in establishing the foundation stone of entrepreneurship education in academic centers. Usually, a tentative entrepreneurship education venture begins with a single and elective business planning course. Particularly, this approach has been quite common in non-business majors such as science and engineering. When the course is consolidated with a successful methodology and a group of specialized scholars, more sophisticated ways of teaching entrepreneurship materialize (e.g. entrepreneurship centers, psychology-based entrepreneurship courses, entrepreneurial orientation for established disciplines such as marketing or finance).

In our case, it was not different. *Entrepreneurship: Development of a Business Plan*, whose purpose was to teach students how to write a business plan in an entrepreneurial way, was first offered in 2003, as an elective course of Curso de Especialização em Administração Industrial (CEAI).

Launched in 1978, CEAI is one of the most traditional executive post graduation programs offered by Universidade de São Paulo (Brazil) through its industrial engineering school (Escola Politécnica – Departamento de Engenharia de Produção) in partnership with its foundation (Fundação Vanzolini).

Up to now, more than 11,000 students have enrolled CEAI and the vast majority of them have majors in engineering and science-related fields such as chemistry, pharmaceuticals, biology and physics. Interested in enhancing their managerial capabilities, typical students age ranges from 25 to 30s and they occupy mid management positions in medium and large corporations.

To conclude the program, students must get approval in eleven courses (at least seven required courses and at most four elective courses) and write a final dissertation. Each course has twelve weekly classes (3 months) and each class lasts three hours, totaling 36 hours. The number of students per class has ranged from 20 to 30 and the minimum grade to pass the course is seven.

*Entrepreneurship: Development of a Business Plan* was planned to be the most innovative course of CEAI. A new electronic learning platform was developed in order to allow students to interact with online content (case studies, frequented asked questions, question & answer tutorials, online message board, spreadsheets and guided tour to the business plan topics), and with other students, teacher and tutor through chat boards and electronic messages. To take advantage of such features, students had to attend six of twelve classes virtually.

Despite the huge efforts in software development, content customization and interaction process mapping, the first two editions of the course had neither caught major attention of students nor enthusiastic approval of those who attended them.

Students of the first edition rated the course 7.1 (0 to 10 scale) placing *Entrepreneurship: Development of a Business Plan* in the third quartile of ranks when compared to other CEAI courses. The second edition reached 5.7 grade, one of the lowest rank of the program.

The easiest way would be to terminate the course. But the program coordinator, the
teacher and tutor decided to make adjustments in order to allow the course to take off.

In this paper, we present some of the lessons learned in seven editions of the course with special attention to the period between the first and the fourth editions, comprising the course launching and the adjustment period. A brief chronological evolution of *Entrepreneurship: Development of a Business Plan* can be observed in the following table.

**Table 1: Course editions and evolution of modus operandi**

<table>
<thead>
<tr>
<th>Period</th>
<th>3Q'03</th>
<th>1Q'04</th>
<th>2Q'04</th>
<th>3Q'04</th>
<th>1Q'05</th>
<th>2Q'05</th>
<th>3Q'05</th>
<th>1Q'06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Edition</td>
<td>1st</td>
<td>2nd</td>
<td>3rd</td>
<td>4th</td>
<td>5th</td>
<td>6th</td>
<td>7th</td>
<td></td>
</tr>
<tr>
<td>Internet based</td>
<td>50%</td>
<td>25%</td>
<td>16%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>classes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional</td>
<td>50%</td>
<td>75%</td>
<td>84%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>classes</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching</td>
<td>Distance learning</td>
<td>Distance learning</td>
<td>Face-to-face</td>
<td>Face-to-face</td>
<td>Face-to-face</td>
<td>Face-to-face</td>
<td>Face-to-face</td>
<td>Face-to-face</td>
</tr>
<tr>
<td>approach</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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</tr>
</tbody>
</table>

Source: Authors

**2. Justification**

Despite the fact that entrepreneurship has reached strategic positions in public policies, regional development planning and public opinion, the same is not fully true in the academia, specially in non-business majors which have not realized that entrepreneurship education is important for their future engineers, chemists or biologists to face new employment challenges or capture new business opportunities. Indeed, in many leading business schools, students keep on interested in challenging and well paid jobs in multinational giant conglomerates.

Deliberately, academic initiatives in entrepreneurship education have started tiny; and the business plan based course has been one of the first “entrepreneurial” courses introduced in the curricula, usually in a tentative basis and by an open or elective course. If it fails in getting students participation and reasonable evaluation, it can be terminated and other entrepreneurship education ventures can be aborted. It explains the strategic importance of a nice taking off to a pioneering entrepreneurship course in a consolidated academic program.

In this context, we believe that our lessons learned during the adjustment process can be useful for both newcomers or established business plan courses and other entrepreneurship educational initiatives, specially in non-business majors.

**3. Method**

This paper presents some of the lessons learned during the launch and adjustment period of an entrepreneurship course. The authors of this paper, respectively the teacher, the program coordinator and the program tutor, conducted the research on the course of the adjustment process. It occurred mainly from the second quarter and the third quarter of 2004, when it was planned and implemented the restructured version of *Entrepreneurship: Development of a Business Plan*. Main data sources were periodical evaluation made by enrolled students (twice per course edition), student self-evaluation conducted at the end of the course and informal communication between educators and students.

The research process mentioned above has typical elements of an Action Research (AR). According to Coughlan and Coghlan (2002), several broad characteristics define AR:

a) Research in action, rather than research about action;
b) Participative;
c) Concurrent with action;
d) A sequence of events and an approach to problem solving.
In our study, we have conducted the research at the same time we were dealing with the researched issue (entrepreneurship course turnaround). We also took into consideration what Coughlan and Coghlan (2002) call AR cyclical four-step process: planning, taking action and evaluating the action, leading to further planning and so on.

4. Launch and adjustment process

*Entrepreneurship: Development of a Business Plan* was first offered in the 3rd quarter of 2003. It was planned to be the most innovative course of CEAI. The main purpose of the course was to teach students to write a business plan. To help them, a new electronic learning platform was developed. It had allowed students to interact with online content (case studies, frequently asked questions, question & answer tutorials, online message board, spreadsheets and guided tour to the business plan topics), and with other students, teacher and tutor through chat boards and electronic messages. To take advantage of such features, students had to attend six of twelve classes virtually.

Despite all efforts in developing a new platform to help students to develop an entrepreneurial business plan, the first two editions of *Entrepreneurship: Development of a Business Plan* failed in getting students approval and participation and the course had to be restructured.

To restructure the course, we have decided to join what Honig (2004) called “conventional entrepreneurship business planning education” to what McAdam & Leitch (2005) defined as “active learning in entrepreneurship education”. The first two editions of the course were typical “conventional entrepreneurship business planning education” if we considered that they were structured in such a way that students may interpret entrepreneurship as a linear process according to a step-by-step development of a business plan. The new modified version of *Entrepreneurship: Development of a Business Plan* considered the active participation of students in generating discussions and in evaluating works of their classmates and their own tasks. This new approach has created an open and dynamic environment for discussing business planning in an entrepreneurial way.

In such a way, we tried to deal with the two dimensions mentioned by Nonaka (1994) in the process of knowledge creation: explicit and tacit knowledge. According to this author (Nonaka 1994, p 16), while “explicit” or codified knowledge refers to knowledge that is transmittable in formal, systematic language, the “tacit” knowledge has a personal quality, which makes it hard to formalize and communicate. Nonaka (1994) mentions that tacit knowledge is deeply rooted in action, commitment, and involvement in a specified context.

Our first challenge was to deal with the *modus operandi* to be adopted. And the initial change concentrated in reducing the number of internet-based classes. In the first two edition, six of twelve classes of *Entrepreneurship: Development of a Business Plan* were based on distance learning tools, where students interacted with an e-learning platform. By answering questions raised by the platform, analyzing cases and filling forms, students could develop their business plans. Questions could be answered by an online FAQ (frequent asked questions) tutorial, by the teacher who was available by chat according to a scheduled agenda and by a tutor who could be contacted by chat, message board or electronic message.

As the virtual platform had not got significant approval of students (average grade of 6.0 out of 10.0) and the distance learning features such as chat and message board had obtained modest student evaluations (average grades of 4.3 and 4.8, respectively), we decided to reduce the number of virtual classes (see Table 1) and increase the number of traditional face-to-face classes. Since the fourth edition, all classes have been face-to-face based.
Table 2: Syllabus comparison

<table>
<thead>
<tr>
<th>Original version</th>
<th>After turnaround</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Course presentation (F)</td>
<td>1. Course presentation and introduction to entrepreneurship I (F)</td>
</tr>
<tr>
<td>2. Business concept: products and services (D)</td>
<td>2. Introduction to entrepreneurship II (F)</td>
</tr>
<tr>
<td>3. Strategy, market and competition (D)</td>
<td>3. Business concept: products and services (F)</td>
</tr>
<tr>
<td>4. Marketing and sales (D)</td>
<td>4. Strategy, market and competition (F)</td>
</tr>
<tr>
<td>5. Team and operations (D)</td>
<td>5. Marketing and sales (F)</td>
</tr>
<tr>
<td>6. Financial planning (D)</td>
<td>6. Team, operations and business model (F)</td>
</tr>
<tr>
<td>7. Fund raising and valuation (D)</td>
<td>7. Financial planning (F)</td>
</tr>
<tr>
<td>8. Working session (F)</td>
<td>8. Lecture of entrepreneur (F)</td>
</tr>
<tr>
<td>9. Working session (F)</td>
<td>9. Business plan review (F)</td>
</tr>
<tr>
<td>10. Invited lecturer (F)</td>
<td>10. Fund raising and valuation (F)</td>
</tr>
<tr>
<td>11. Working session (F)</td>
<td>11. Executive summary (F)</td>
</tr>
<tr>
<td>12. Business plan presentation (F)</td>
<td>12. Business plan presentation (F)</td>
</tr>
</tbody>
</table>

Notes: F = Face-to-face class D = Distance learning

This decision allowed us to introduce new information content and new features of active learning. Moreover, Nonaka (1994) clarifies that interactions between individuals, such as the face-to-face classes, typically plays a critical role in the amplification and development of new knowledge.

Core body of information of business planning was maintained and the virtual platform was adopted as a “learning center” where students could interact with online information to improve explicit knowledge of business planning. It has also been used by students to upload required homework and receive individual feedbacks of their progress.

During the first edition of the newly modified course (in fact, the third edition – 3Q’04), students were allowed to follow the original version. In other words, students could develop their business plan entirely through the virtual platform. Attendance at the face-to-face classes was not compulsory for those who chose the original version.

The second challenge was more complex to solve. Considering that the name of the course was Entrepreneurship: Development of a Business Plan, how to integrate the subject entrepreneurship with an ordinary 3-month business plan module?

The easiest way to solve this issue was to eliminate the term entrepreneurship and concentrate efforts in the formal business planning topics. But it would get rid of the original essence of the course, which was to help students to adopt a “more” entrepreneurial discipline in their career development through business planning skills. In addition, this modification could place the course in the “more of the same” discussion if compared with other CEAI courses where elements of business planning are also discussed.

In order to add the entrepreneurship concept to the syllabus of Entrepreneurship: Development of a Business Plan two new major changes were made. The first one was concerned about how to motivate students to believe in entrepreneurship. The second change handled how to let students experience the alternative entrepreneurial orientation.

Keeping in mind these points of reference and the academic limitations, a new scope was designed to restructure the course as observed in the next figure.
In this new scope, at first, students must believe that entrepreneurship makes sense for them. In the original scope, we observed a modest level of motivation (6.0 average grade) when asked if the acquired knowledge had potential application for them. For this reason, the three classes of the modified course are dedicated to inspire students to act as entrepreneurs by working three enthusiastic aspects:

a) **Personal relevance**: Students are invited to discuss seriously the real role of entrepreneurs for countries: Why ten of the ten biggest US companies were founded by entrepreneurs while in Brazil this figure falls to only two companies; why the newest fast growing companies are typical entrepreneurial companies, and so on.

Students are also invited to chat why entrepreneurship can make sense for them; why they were educated to get a good job; what is the quality of their employment now and in the future; why it is necessary to think about a “plan B”; why do they live for.

b) **Innovative company with meaning**: Students must believe that there are many real business opportunities and that they are able to develop innovative ways to capture them. In addition, students ought to create a business concept that takes advantage of the identified opportunity. In special, this business idea must make meaning for them. And *make meaning* for an entrepreneur is not about money, power or prestige according to Kawasaki (2004). In his book *The art of the start*, Kawasaki (2004) says that among the meanings of “meaning” are to:

- Make the world a better place;
- Increase the quality of life;
- Right a terrible wrong;
- Prevent the end of something good.
Danko (2005) has also raised the question of reframing entrepreneurship as a social change agent. This author has demonstrated that when there is a shift in mindset away from a transactional view of the role of business in society to a transformational one, many students engage the process of entrepreneurship in a personally meaningful way.

In our case, innovation and make meaning discussions have brought new motivational factors to students start thinking about entrepreneurship.

c) Slingshot approach: Usually students learn “how to use bazookas” by studying strategies of global giant companies. Although examples of Coca-Cola and Unilever are quite interesting, entrepreneurs must craft strategies with few and limited resources. In this context, students must learn how to launch and develop a company by using accessible “weapons”. Moreover, students find out that the vast majority of the founders of global giant companies have started their companies with almost “no money”. The slingshot approach raised the personal relevance of entrepreneurship for our students because they realize that bootstrapping could be a real option for them.

After including new motivational elements to the course scope, the second major change to deal with was how to let students experience the alternative entrepreneurial orientation. It was a real big challenge because the course was new and with no consolidated connection with other courses; it has a limited amount of time (twelve classes with 3 hours each); and it is attended at night (19:30 to 22:30) for students who work the whole day.

In this case no full solution was put into practice. Partial solution was delivered by adopting a short theatrical play at the end of each class. Students are divided in pairs and each pair is asked to identify an innovation opportunity for a given entrepreneurial and successful Brazilian company. Each pair must prepare a 3-slide work presenting the entrepreneur history, the company evolution and the innovation business idea. Before the presentation, the teacher chooses a student that will act as a “devil” and other that will act as an “angel”. Role-play of the “devil” is to find reasons why the business idea will go wrong, and the “angel” has to support the proposed innovation. Initially, the pair interacts with the “devil” and “angel”; and after with the entire class. The purpose of this play is let students to:

a) Identify innovation opportunities for a successful company;

b) Model and plan the opportunity;

c) Be in touch with inspiring histories of Brazilian entrepreneurs and companies;

d) Develop a persuasive presentation;

e) Train elevator pitch;

f) Test an idea in public;

g) Deal with unfavorable judgments;

This theatrical play has also helped students in enhancing skills to present their business plans in the last class, when analysts of venture capital firms are invited to judge “entrepreneurs” and their plans. At this point, Nonaka (1994) says that “hands on” experiences are decisive to individuals accumulate “tacit” knowledge and that quality of this knowledge is determined by the embodiment of knowledge through a deep personal commitment into bodily experience.

Evaluation of students was the last key modification conducted during the turnaround process. In the first two editions of the course, students were evaluated by the teacher taking into account their business plan written during the course. The new evaluation method adopted from the third edition has considered the average of three grades: 1) Grade given by invited analysts to business plan presentations at the last class; 2) Teacher evaluation considering student’s contributions; and 3) Student self-assessment.

In the case of student self-assessment, students must identify the major strengthen of
the plan he/she developed, the three main weaknesses and how to solve them. At the end of
the assessment, student must evaluate their plan by rating a grade from zero to ten.

5. Lessons Learned

Taking into consideration the course evaluation and popularity among CEAI students,
the turnaround process has succeeded. *Entrepreneurship: Development of a Business Plan* left
the last positions in 3Q’03 and 1Q’04 to reach the leading ranks from the 3Q’04 as observed
in the next figure.

**Figure 2:** Historical course evaluation and popularity

![Course Evaluation and Popularity Graph]

Source: Authors

In addition, the number of enrolled students has increased steadily after the turnaround
process. Furthermore, the course has become popular among students by mouth-to-mouth
advertising made by alumni; and it has placed itself as one of “first choice” courses even
though it is an elective option.

Five editions after the turnaround process, it is possible to list some lessons learned.

1) **Students must have a reason to believe in entrepreneurship**

The “build a better mousetrap and the world will beat a path to your door” lesson
was also valid for our course. Although entrepreneurship had a clear value for us
(educators) the same was not valid for students. They were more interested in
enhancing their careers as employees than establishing their own new business.
For this reason, we have started to spend a good time (class #1 and #2) in
explaining that entrepreneurship has a real importance for students from the point
of view of necessity and opportunity. A “plan B” in case of unemployment is the
critical concern when the necessity point of view is considered. But the most
important issue for our students has been taking advantage of the opportunity point
of view. Students are invited to identify and analyze new business opportunities.
The opportunities can be linked to a solution of a real problem, an innovative way
to existing practices or something that students love with well defined market
demand. The purpose here is to empower students and let them believe that he/she
can plan the identified business opportunity.

Besides the popular way of defining entrepreneurship (set up your own business),
students have realized that entrepreneurship skills can also be applied in their
current jobs. Due to the intense increase of competition, they realized that
established corporations have started to support intrapreneurship initiatives and
corporate entrepreneurs.
To advance to the next topics of business planning, our students must believe that entrepreneurship makes a real difference for him/her.

2) **Teacher should help students in strengthening an inspiring business idea**
Students usually face many difficulties in selecting one single business idea to develop a business plan about it. In our case, we let students choosing a broad business idea, instead of identifying a clear business opportunity. It is quite common students select a general business segment (a wine retailer, a restaurant or a cosmetic company) as the “business idea”.
After this step, we help them to improve the business idea by presenting other innovative similar ventures located in other regions and other non-related business that can inspire students to develop new business models by merging strategies of different industries. In addition, we help students to visualize the real value of his/her business and how this value and its target market will change in the next years. Here, Levitt’s (1960) article Marketing Myopia has central role in consolidating their business opportunity.
Another discussion with students is about why his/her company will make meaning, issue raised by Kawazaki (2004). In our course, students learn that the most common business can (and must) have a meaning. Make meaning, according to Kawazaki (2004) has a huge power of motivating the entrepreneur him/herself, employees, customers and partners. It is the easiest way to spread and consolidate the mission and align strategy of nascent companies.
To go ahead in writing their business plans, students must be able to develop companies with meanings.

3) **Coaching approach in teaching business planning**
In our case, we have nearly three months to teach business planning for students with engineering or science academic backgrounds and therefore with few or no knowledge of strategy, marketing, finance, accounting, human resources or production management. Additionally, we want to improve entrepreneurship skills of students who are really busy, by working during the day and attending classes at night.
Due to these limitations, an intense customized educational program must be developed for each student. In our case, besides being teacher, we act as business consultant and personal trainer, demanding a passionate dedication to each one.
To make sense, examples in classes are be directly related to business developed by each student. The same approach is adopted when we selected additional reading materials.
To teach *Entrepreneurship: Development of a Business Plan* we have acted as a coacher of each student.

4) **Development of creative and motivating educational tools to strength entrepreneurial skills.**
Traditional business skills and frameworks such as Porter’s 5 forces to analyze market and competition, BCG model to assess portfolios or 4P’s framework to develop marketing strategy are highly useful for us because they have helped us to explain complex concepts.
Our virtual platform makes also a great contribution because its tutorial, FAQs, “fill blanks” wizards and on demand case studies assist students in developing business skills quickly and effectively.
But to strengthen entrepreneurial skills traditional business planning methods are not enough. In our case, it was necessary to adopt new tools such as movies,
informal chats with real entrepreneurs, games, and theatrical plays. We have used long films of entrepreneurial ventures to introduce the course. It entertains students and generates an open and friendly room for discussing basic entrepreneurship elements such as dreams, future visioning, leadership, creativity, teamwork, and perseverance, among others. Short movies have been used to introduce special concepts such as Kawazaki’s (2004) *make meaning* concept, creativity or improvisation.

We have a special partnership with a non-governmental organization which supports entrepreneurship in selected countries called Endeavor. Its associated entrepreneurs are invited to tell their histories and chat with our students. Games are used to motivate students in fuzzy issues such as choosing a business idea, the business name or developing the brand character of the company. Moreover, question-and-answer games are employed to challenge students to give examples or remember content studied in previous classes. All games are rewarded by small gifts such as chocolates, candies or wines.

A mix of well established business skills and creative educational tools have helped us to teach complex business issues while we entertain students and boost their entrepreneurial skills.

5) **Business plan based course can also develop student entrepreneurial skills**

Although business plan based courses have limitations when entrepreneurship education is considered (Honig, 2004), we believe that it is feasible to teach business planning with some typical elements of entrepreneurship. In our case, the stronger the connections between both issues, the more powerful are the synergistic results.

When compared the evaluation made by students of the original version (3Q’03 and 1Q’04) and the following modified versions, it is possible to note a consistent improvement in assessments like the course relevance for student’s career (personal relevance) and the new body of knowledge acquired during the course (new knowledge developed) as observed in the next figure.

Direct observations on changes of student behaviors and their informal feedbacks have indicated advances in adopting a “more entrepreneurial” discipline in their lives.

Figure 3: Course impact on students personal development

![Figure 3: Course impact on students personal development](image)

Source: Authors
6. Conclusion

We presented here a brief history of our saga of teaching entrepreneurship and business planning for non-business students of a post graduation program. We planned and developed a cutting edge education platform to launch *Entrepreneurship: Development of a Business Plan*. Although all previous analyses and detailed content development, we failed in the taking off phase and we had to land the course for repairing.

After analyzing our faults, we were able to develop a new version of the course that has finally taken off. Since then, course evaluations made by the students have reached leading positions when compared to other courses of the CEAI program.

But the most important for us is that we have made meaning. When our course are rated 9+ in course evaluation criteria such as “relevance for student’s career” or “new knowledge acquired”, we are making meaning according to Kawasaki’s (2004) view. It was the most important lesson learned from the turnaround process.

Finally, our students have realized that entrepreneurship is a discipline and it demands a continuous self-development effort. Consequently *Entrepreneurship: Development of a Business Plan* is not an end itself but just the beginning of a new way of personal, social and economic development.

7. References


