

# Circular Business Plan: entrepreneurship teaching instrument and development of the entrepreneurial profile



ISSN 0104-530X (Print) ISSN 1806-9649 (Online)

## Plano de Negócios Circular: instrumento de ensino de empreendedorismo e desenvolvimento do perfil empreendedor

### Flavio Mangili Ferreira<sup>1</sup> Camila Roberta Muniz Serra Pinheiro<sup>1</sup>

Abstract: Due to the necessity for innovation and value creation for organizations, entrepreneurship education has become part of contemporary educational institutions. It is necessary to develop tools that provide a favorable learning environment. The Business Plan is an useful tool in teaching entrepreneurship, contributing to the development of entrepreneurial teachers and students from different areas. This paper aims to analyze the Circular Business Plan as an active methodology for teaching entrepreneurship during the workshop Building a Business Plan. The version of Circular Business Plan presented in this work was demonstrated through applied research, using qualitative method with exploratory goal during field of study. We analyzed 10 workshops Building a Business Plan in the same educational institution, with 160 participants develop 48 business ideas developed by groups with 3 people on average. Learning self-assessment answered by the participants, as well as the evaluation of teachers on student responses at Circular Business Plan built during the workshops Building a Business Plan, demonstrated that the active methodology contributes to the entrepreneurial development, from skills, different knowledge, attitudes and values. Future research will improve this active methodology and the teaching of entrepreneurship, as well as contribute to the development of the entrepreneurial profile.

Keywords: Development of Products and Services; Entrepreneurship; Strategic planning.

Resumo: Em função da necessidade de inovação e criação de valor para as organizações, o ensino do empreendedorismo tem se tornado presente nas instituições de ensino contemporâneas, neste contexto, desenvolver instrumentos que proporcionem um ambiente favorável ao aprendizado voltado ao assunto torna-se necessário. O Plano de Negócios é um instrumento que pode ser utilizado no ensino de empreendedorismo, contribuindo para o desenvolvimento do perfil empreendedor em professores e alunos de diversas áreas. O objetivo deste artigo é analisar o Plano de Negócios Circular como uma metodologia ativa para ensino do empreendedorismo durante a Oficina Construindo um Plano de Negócios. Por meio de uma pesquisa aplicada, utilizando o método qualitativo com objetivo exploratório durante estudo de campo, as respectivas análises demonstraram a versão do Plano de Negócios Circular apresentada neste trabalho. Foram analisadas 10 Oficinas Construindo um Plano de Negócios na mesma instituição de ensino, com 160 participantes desenvolvendo 48 ideias de negócios elaboradas por grupos com 3 pessoas, em média. As auto avaliações de aprendizagem respondidas pelos participantes, bem como a avaliação dos professores sobre as respostas dos alunos no Plano de Negócios Circular construído durante as Oficinas Construindo um Plano de Negócios, demonstram que a metodologia ativa contribui para o desenvolvimento do perfil empreendedor, a partir de competências, diferentes conhecimentos, habilidades, atitudes e valores. Futuras pesquisas possibilitarão o aprimoramento desta metodologia ativa e melhorias para o ensino do empreendedorismo, bem como contribuir no desenvolvimento do perfil empreendedor.

Palavras-chave: Desenvolvimento de Produtos e Serviços; Empreendedorismo; Planejamento Estratégico.

#### 1 Introduction

The purpose of the Circular Business Plan is to meet the main challenges of teaching entrepreneurship, how to put into practice and systematize business ideas in the area of chosen knowledge. In contemporary educational institutions focused on professional training, entrepreneurship education has become a reality, enabling future professionals in different areas to develop, implement, organize

Received May 27, 2017 - Accepted Sept. 30, 2017

Financial support: None

<sup>&</sup>lt;sup>1</sup> Centro Universitário Senac, Senac Bauru, Av. Nações Unidas, 10-22, CEP 17010-130, Bauru, SP, Brasil, e-mail: flavio.mferreira@sp.senac.br; camila.rmspinheiro@sp.senac.br

and monitor their own enterprise or to manage their career proactively (Volker apud Ferreira et al., 2009; Alberto et al., 2007; Faltholm et al., 2010).

In this sense, the use of different instruments that can awaken the entrepreneurial characteristics not only to the students, but also to the teachers of several areas of technical and higher education institutions, providing a favorable environment for the learning focused on the subject.

In entrepreneurship teaching, the Business Plan is the main tool, composed of several complex planning items that can hinder the development of business ideas. Therefore, facilitating the process of teaching the Business Plan can contribute to the development of the theme.

Research by the Global Entrepreneurship Monitor (GEM, 2014) with experts indicates that there is fragility in the conditions of Commercial and Professional Infrastructure, a factor that positively influences the entrepreneurial activity in the country, under these conditions include the guidelines on how to write a business plan.

In this sense, the Circular Business Plan, an instrument developed in the context of this work, was chosen to train teachers, employees and students from different areas in the institution of technical and higher education in which this study is contextualized.

The complexity of business plans makes it difficult to use in the business area, and this proposed methodology can contribute in a practical way to business planning or innovation.

In this context, the proposed research question is how to teach the business plan for people with diverse backgrounds and experiences using the Circular Business Plan?

The objective of this study is to analyze the Circular Business Plan as an active methodology for teaching entrepreneurship during the Workshop Building a Business Plan.

#### 2 Theoretical reference

## 2.1 Entrepreneurship and entrepreneurial profile

Stokes et al. (2010) emphasize the importance of entrepreneurship as a social and economic process that creates value for different people in various contexts. The authors understand entrepreneurship in three dimensions, entrepreneurship as a process, entrepreneur as a person, and, finally, entrepreneurs as value-makers, deploying entrepreneurship in a wide range of different contexts.

For Schumpeter (1985), the entrepreneur begins the process of economic development through a new and intentional phenomenon that alters the equilibrium of the flow of the economy with new combinations, discontinuing business and shifting this flow.

Dornelas defined Entrepreneurship as the "involvement of people and processes that together lead to the transformation of ideas into opportunities" (2008, p.22), and being perfectly implemented lead to the creation of new businesses, taking calculated risks to capitalize the investment.

However, entrepreneurship is much broader than just opening a business of its own, encompassing different organizational contexts. Companies need to seek new forms of management, new products and services that generate competitive advantage, mainly through the capacity of innovation of their employees through intrapreneurship and corporate entrepreneurship (Vargas apud Sequeira, 2005).

Barringer & Bluedorn (1999) contend that corporate entrepreneurship is a behavioral phenomenon in which firms position themselves within a highly conservative, highly entrepreneurial continuum. For them, entrepreneurial companies take risks, innovate and adapt quickly to change, and have employees with entrepreneurial behaviors that facilitate the continuity of business in an extremely competitive and turbulent environment.

Entrepreneurship is a relevant topic today. Companies recruit and select people aligned with the entrepreneurial profile. The market demands an entrepreneurial attitude. Life requires entrepreneurial behavior. However, what is it to be an entrepreneur? There are many misconceptions related to the topic, because most people have the idea that entrepreneur is only that person who opens their own business in an autonomous way.

In this sense, entrepreneurship can be as a vehicle of upward social mobility, especially for the middle class, which many times considered the cradle of entrepreneurship. However, many times the incentive of entrepreneurship as a means to create jobs and promote growth is far from be realized. In general, the study of entrepreneurship is focused on startups and small businesses, including self-employed individuals as entrepreneurs (Faltholm et al., 2010).

Another form of entrepreneurship that has been gaining strength is social entrepreneurship. Through the social entrepreneur seeks to build a better world and develop people by engaging in humanitarian causes and in organizations that seek to fill gaps left by public and private powers.

In this sense, the entrepreneur may also have an attitude in the work environment in which he is inserted, called entrepreneur, and he can be a social entrepreneur when he seeks benefits for the community in which he is.

It is believed that in the process of undertaking personal characteristics are highlighted, but for classic authors like Gartner (1988), personal traits refer to a portion only in the process of undertaking, since the creation of companies is quite complex and influenced by several factors.

Other authors point out that research on entrepreneurship should focus on what the entrepreneur does and not on what the entrepreneur is. The main characteristics cited are taking risks, creativity, innovation, initiative, autonomy, experience, desire for independence, know-how, courage, motivation, among others (Vicenzi & Bulgacov, 2013).

Kirby (2002) considers as fundamental to the entrepreneur, the following behaviors: total commitment, determination and perseverance; orientation of actions for achievement and growth; orientation by objectives and opportunities; initiative and personal responsibility; internal control; tolerance to ambiguity, stress and uncertainty; self-control, integrity and trust; power of decision, patience and sense of humor; know how to calculate and take risks; knowing how to listen and knowing how to use feedback; team work; and learn from mistakes.

Crissien (2011) presents behaviors and skills necessary for the entrepreneur. The author lists the following behaviors: conducts research and seizes opportunities; has initiative; solve problems creatively; is independent; takes responsibility for things; has vision beyond the obvious; establishes networking; obtains creative resources; and uses common sense to take calculated risks. Skills involve creative problem

solving, persuasion, negotiation, holistic management, and strategic thinking.

The characteristics of the entrepreneurial profile presented by Vicenzi & Bulgacov (2013), Kirby (2002) and Crissien (2011) are in Chart 1. These characteristics contributed to the definition of the items of the self assessments answered by the participants of the Workshop Building a Business Plan.

Providing situations that favor the development of entrepreneurial profile characteristics and evaluating the efficiency of these situations can contribute to the teaching of entrepreneurship.

#### 2.2 The teaching of entrepreneurship

Volker (apud Ferreira et al., 2009) affirms that educational institutions are developing the entrepreneurial culture, seek the generation of wealth through the training of their students to acquire the wealth of knowledge, communication and creativity, to make their students aware of wealth in the form of goods and in the form of capital (human, social, intellectual, monetary, among others). This construction obviously goes through the processes of production, concentration, distribution and expansion of these capitals.

Historically, entrepreneurship education has begun in the United States, in business schools, and has spread to various countries. In 1947, Myles Mace offered the first course of entrepreneurship at

**Chart 1.** Characteristics of the entrepreneurial profile.

Vicenzi & Bulgacov (2013)	Kirby (2002)	Crissien (2011)	Auto avaliação da aprendizagem
Experience	Tolerance to ambiguity, stress and uncertainty; Power of decision, patience and sense of humor.	Strategic thought; Research and seize opportunities.	Make decisions
Initiative; Motivation.	Initiative and responsibility person.	Initiative.	Initiative and Motivation.
	Self-control, integrity and trust; Know how to listen and know how to use feedback; Team work.	Do networking; Persuasion.	Team work
Creativity; Innovation.	Learn from mistakes.	Solve problems creatively; Creative problem solving.	Creativity and Innovation.
Know-how.	Guidance by objectives and opportunities.	Vision: see beyond the obvious; Holistic management.	Market view
Take risks Courage.	Internal control; Know how to calculate and take risks.	Uses common sense to take calculated risks; Negotiation.	Risk analysis
Autonomy; Desire for independence.	Total commitment, determination and perseverance.	Behaves independently; Take responsibility for things.	Autonomy and independence
	Guidance actions for achievement and growth.	Gets creative features.	Planning Skill

Harvard for 188 students, but certainly a number of earlier events were the basis for the creation of this course, such as Schumpeter's 1936 academic year at Harvard (Lavieri, 2010).

This reflects positively on the country's entrepreneurial capacity and on the number of new businesses created to date. In the European Union, entrepreneurship education is more recent, but the interest with which this theme is addressed is well documented in a report approved by the Education Council of the European Union (EU). In this report, the development of entrepreneurship within education and training systems is recommended (Alberto et al., 2007).

However, the concept of entrepreneurship education was limited to the aspects related to the creation of the company, since the education system was considered incapable of forming entrepreneurs. This purely psychological view has been abandoned and replaced by a behavioral view that views business creation as a response to external situations. Aspects such as culture, education, economic and social conditions, available resources, existing and identified opportunities, can contribute to entrepreneurship and to the decision of the individual to become entrepreneur. The change from the psychological to the behavioral paradigm had as its main consequence the acceptance of the thesis, according to which entrepreneurship can be stimulated through education and the behaviors that a successful entrepreneur must have are all likely to be learned and taught (Alberto et al., 2007).

In this sense, Dolabela (2004) emphasizes that one can not direct a person to be an entrepreneur of a new business, because to open a company can be an option of the student. For the author, within Entrepreneurial Pedagogy, the entrepreneurial activity becomes universal, so it is possible to be entrepreneur in any activity, such as musician, poet, public official, politician, etc.

In educational institutions, undertaking implies a posture that identifies knowledge as a good that is created, developed and transmitted. According to Santos & Caseiro (2012), conventionally, transmission can be done for students, but also undertaken within the institution itself.

The very act of undertaking in its various forms already leads to transversely. In this sense, it is believed that it is fundamental that an entrepreneurial culture be stimulated through training programs on identifying opportunities and implementing solutions to responses to them, by creating organizations or launching new business. Training in entrepreneurship is now as necessary to a management professional or economist as to a professional in the field of humanities, such as social sciences, engineering or the arts (Santos & Caseiro, 2012).

According to Dolabela (2004), in the countries of North America or Europe, the one who usually takes the entrepreneurial content to the classroom is the professor of administration. The author reports that in Brazil it is possible to find professionals in physics, philosophy, journalism, computer science, in short, from all areas of knowledge, offering this content to students. This is a Brazilian innovation.

There is a compartmentalized and super-specialized teaching structure that dominates the classrooms. However, it is known that the teacher is a key player in the construction of an entrepreneurial mindset and, as is emphasized, this is not seriously considered in the academic structure, whose structuring principle lies in the solitude of teaching, each with its discipline (Guerra & Grazziotin, 2010).

Therefore, Guerra & Grazziotin (2010) reinforce that educational institutions should be responsible for developing a network of interrelated knowledge, providing the search for the realization of ideas that lead to break paradigms and destroy myths that may prevent the development of a society. The authors warn that an entrepreneurial-minded educational institution is only possible with management, professionals and entrepreneurial-minded teachers.

In this sense, it is absolutely decisive in the construction of an educational institution to make changes in the organizational culture. More than the commodification and commercialization of knowledge, understood as outputs of this process, it is crucial to build an entrepreneurial, bottom-up, aggregating, inclusive and mobilizing mentality of the teaching and learning human resources of the different academic bodies (Santos & Caseiro, 2012).

According to Dolabela (2004), in the countries of North America or Europe, the one who usually takes the entrepreneurial content to the classroom is the professor of administration. The author reports that in Brazil it is possible to find professionals in physics, philosophy, journalism, computer science, in short, from all areas of knowledge, offering this content to students. This is a Brazilian innovation.

There is a compartmentalized and super-specialized teaching structure that dominates the classrooms. However, it is known that the teacher is a key player in the construction of an entrepreneurial mindset and, as is emphasized, this is not seriously considered in the academic structure, whose structuring principle lies in the solitude of teaching, each with its discipline (Guerra & Grazziotin, 2010).

Therefore, Guerra & Grazziotin (2010) reinforce that educational institutions should be responsible for developing a network of interrelated knowledge, providing the search for the realization of ideas that lead to break paradigms and destroy myths that may prevent the development of a society. The authors warn that an entrepreneurial-minded educational institution

is only possible with management, professionals and entrepreneurial-minded teachers.

In this sense, it is absolutely decisive in the construction of an educational institution to make changes in the organizational culture. More than the commodification and commercialization of knowledge, understood as outputs of this process, it is crucial to build an entrepreneurial, bottom-up, aggregating, inclusive and mobilizing mentality of the teaching and learning human resources of the different academic bodies (Santos & Caseiro, 2012).

Thus, the first two competitions of business plans were created in 1984 at the University of Texas at Austin and at Babson College. Lange et al. (2004) conducted a study to verify the correlation between winning competitions from business plans and becoming a victorious business person. The survey interviewed 1,967 graduates at Babson College between 1985 and 2003 and found a statistically significant relationship between winning a competition and starting a new business. In Babson College, for example, one of the most traditional entrepreneurship schools, students, in the first semester of college, receive a grant to open a business on campus (Andreassi & Fernandes, 2010).

Strategies like this are important because according to Bizzotto (2008) it is very common that the entrepreneur is "passionate" for an idea, without doing a more in-depth analysis. The author emphasizes that this can prevent the entrepreneur from visualizing the deficiencies and difficulties of the idea. With this, many problems that could be avoided are not considered at the right time.

Friedlaender (2004) proposes the use of available tools to awaken entrepreneurial characteristics in the student, supported by an entrepreneurial management of the institution, modifying pedagogical structures of knowledge transmission to make the student to learn through problem solving and project management.

According to Friedlaender (2004), "[...] Knowledge should be used as a means to awaken in students the desire to learn and seek new knowledge. Learning by doing what you do not know how to do." The author identified that this research awakened entrepreneurial characteristics in participants as "more active, creative behavior, with a broader view of the facts surrounding them, allowing them to find solutions to simulated problems".

Todorovic (2004) presents a conceptual framework examining the relationship between static and dynamic components of institutional culture. For the author, Entrepreneurial Education Activities have static and dynamic components. The static components (theoretical trainings) are insufficient and dynamic components (experiment, do, imitate, study cases etc.) isolated from theory fail in entrepreneurial education. The cultural orientation of the institution influences the learner's learning and may occur outside the classroom and the official curriculum of the course. For Todorovic (2004), they characterize the dynamic components, the innovative, proactive and tolerant institutions, but the author understands that static elements are important and can not be eliminated.

Henrique & Cunha (2008) investigated the methodologies, resources and didactic-pedagogical practices used in entrepreneurship teaching in undergraduate and postgraduate courses at home and abroad through a literature review.

The authors found several methodological practices used, but the preference is for those that provoke student action, through business plan, business simulation, games, development of companies or virtual or real products, visits to companies and entrepreneurs and studies of In this case, the teacher assumes the role of facilitator of the learning process (Henrique & Cunha, 2008).

Pardini & Santos (2008) explain the interdisciplinary methodological proposal of entrepreneurship teaching in undergraduate courses through the vertical and horizontal integration of the disciplines. Horizontally, course coordinators foster correlated activities in the period and a generator theme per period along the course provides vertical integration.

Students are evaluated by team integration, communication, creativity, use of time and autonomy to learn. At the same time, interdependent projects such as extension courses, tutoring services, technical visits, seminars, lectures, study groups, business and entrepreneurs' forum, incubator and business fair with job awards are carried out (Pardini & Santos, 2008).

Many international universities have projects with the aim of facilitating and promoting entrepreneurship among students, professors and researchers. They believe that this is part of a global discourse, creating means to communicate the theme of entrepreneurship, affecting research and science, extrapolating the walls of the academy (Faltholm et al., 2010).

Seikkula-Leino et al. (2010) investigated how teachers promote entrepreneurial education from their own learning and reflection. The authors considered necessary to strengthen entrepreneurship: the learning of entrepreneurship of teachers in the period of training and continuing education; curriculum reform from the perspective of teacher learning and reflection; and the connection between goals and outcomes of entrepreneurial education.

According to Crissien (2011), entrepreneurship education is important to motivate students to participate, to generate a comprehensive database, to collaborate so that the work is quality, to be in tune with leaders and teachers in other areas.

The action research presented by Coelho et al. (2012) shows the entrepreneurial education in elementary education. The teaching of entrepreneurship has used entrepreneurship and innovative teaching practices.

The results showed an increase in the motivation of the teachers, as well as the increase in the participation and learning of the students.

Josien & Sybrowsky (2013) used the eBay site to engage in student activity and teach entrepreneurship. The activity consisted of buying items in garage sales or auctions, selling on eBay and making a profit, allowing the experience of capital investment, inventory purchase, negotiation, communication, identification of opportunities, creativity, time management, accounting, customer and logistics. The Carland Entrepreneurship Index score, a questionnaire that measures the respondent's entrepreneurial pretension, measured the effectiveness of this activity for teaching.

Lima et al. (2006) consider it important that the teaching of entrepreneurship focuses on the elaboration of the business plan so that students understand and learn to use this instrument in management, but abandoning the pre-determined teaching methodologies and making them more flexible.

Dolabela (2008) teaches two basic processes to create a company: the formation of an idea and the path to validation through the Business Plan. It tells a story in colloquial language with a focus on the person, because for the author, knowledge is volatile, mutant, nervous, emotional and the entrepreneur must be prepared to learn how to learn. His methodology uses questions as a way of inducing knowledge by placing the student in the role of entrepreneur seeking answers.

The teaching of entrepreneurship should use active learning methodologies, where the students experience entrepreneurial activities. Researches show that the use of active learning methodologies is efficient.

#### 2.3 Business plan

In the process of business planning, one of the instruments used is the Business Plan. In the elaboration of the Business Plan it is necessary to have a global and systemic view of all the parts that make up the plan, understanding the function of each part and its interrelationship, thus facilitating the process of planning of the entrepreneurs.

Salim et al. (2005) define Business Plan as

[...] a document that contains the characterization of the business, its way of operating, its strategies, its plan to achieve a market share and projections of expenses, revenues and financial results.

For Dornelas (2012), the Business Plan is a management tool that can and should be used by every entrepreneur, following the logical and rational path. The Business Plan describes the enterprise and the business model, providing learning and self-knowledge to the entrepreneur during the elaboration.

It is possible to understand the Business Plan as a "living document" that describes the main aspects of the company in question, since it must be understood as a process and not as a product, that is, a path rather than a point of arrival (Bizzotto, 2008).

In this sense, Pesce (2012) considers the Business Plan as a document that is "[...] always in development. When the company and the market evolve, it's a good idea to update it."

For Lenzi (2009), a business plan is a dynamic tool, but not the only way to achieve personal, professional or business success, the business plan allows for constant evaluation of all the actions that the entrepreneur has been doing and what is helping in its trajectory towards the desired achievements.

Alperstedt & Carvalho (2006) understand that the business plan is a tool that allows predicting, anticipating or reducing many of the causes of failure in new business. It is a document with strategic studies that prove or not the economic or social viability of a project.

There is no standard Business Plan format, authors and various institutions have different structures to guide the preparation of the Business Plan. Chart 2 lists some of the different business plan structures and the last column presents the items in the Circular Business Plan, allowing a comparison of the structures.

Searching for a simplified, relevant and understandable language without losing the essence of planning, Osterwalder & Pigneur (2010) presented the Business Model Canvas, an instrument developed to describe how an organization creates, delivers and captures value, developing the organization's business model. It is a screen divided into nine blocks that must be printed in large format so that a group of people can draft and discuss the elements of the business model.

Lopes (2014) understands that the Business Model Canvas proposal is a business plan represented by images on a single sheet of paper, with the objective of creating a visual map of the company capable of transmitting more relevant information in a short time.

Holm (2011) proposes a business plan elaborated in seven stages in a succinct way, that is visible and can be updated by frequent contributions of the team.

These different approaches to the Business Plan made it possible to understand the development of the planning structure presented in this paper, the Circular Business Plan.

#### 3 Search method

First, regarding the nature of the research, the authors opted for applied research, because for Cás (2008), applied research allows to put into practice laws and general theories for specific cases in problem solving, producing new knowledge, contributing to the advancement of applications, pointing out new

Chaut 2	Durainaga	Dlan Ctm	intimac and	Cinoulan	Durainaga	Plan items

Dornelas et al (2008)	Dolabela (2008)	Nakagawa (2011)	Rosa (2011)	Lenzi (2009)	SBA (2014)	Items of the Circular Business Plan
Executive	Executive	Business	Executive	Executive	Executive	Opportunity
The company	Summary  The company	Opportunity  Company	summary	Business Concept and Mission Company Features	Company description	(Oportunidade)  Company (Empresa)
Operational plan		Products and services			Service or line product	Products and services (Produtos e Serviços)
Market analysis		Consumer market analysis	Market analysis	Market analysis (Diagnosis)		Consumer (Consumidor)
Competition		Competition analyse	Construction of scenarios	Market Strategies (Prognosis)	Market analyse	Environment (Ambiente)
Development plan		Production planning and operations	Operacional Plan	Deployment Schedule		Production and Operations (Produção e Operações)
The marketing plan The ofert	The marketing plan	Marketing and sales planning	Marketing plan Strategic evaluation		Marketing and Sales	Marketing and Sales (Marketing e vendas)
The team		Human resources plan		Organizational and Operational Structure	Organization and Management	Team (Equipe)
Critical risks The financial plan	The financial plan	Financial plan	Financial plan Business plan evaluation	Financial Plan Evaluation and Control	Financial Projections Financing Request Appendix	Finances (Finanças)
				Conclusion and Appendices		

technologies, discovering potentialities of the results and making possible new discoveries.

Regarding the method, the research uses the qualitative method, because Vieira (2006) understands that, despite the subjectivity of the qualitative research, the definition of the questions, concepts and variables of the research and the detailed description of the field procedures allow a "certain" objectivity of the phenomenon under study and "until" its replication. Rich in descriptions, well grounded, qualitative research explains processes in local contexts and helps the researcher to advance their conceptions or revise and turn more flexible their theoretical structure.

Regarding the objectives, this study can be classified as exploratory. Exploratory study is the initial step in the research process, establishing objectives to become

familiar with and seek more information about the subject, to obtain new perspectives and to discover ideas, since it is possible to evaluate the possibility of developing a quality research (Andrade, 2009).

It is a field study, because it aims to obtain information and / or knowledge about a situation through the observation of facts and phenomena, as well as data collection, for analysis (Lakatos & Marconi, 2010). For Gil (2008), the field study seeks to deepen the knowledge of a specific reality, through direct observation and interviews to capture the explanations and interpretations that occur in that reality.

The Circular Business Plan is an active methodology for teaching entrepreneurship. The Circular Business Plan presents a differentiated form of the traditional

business plans. Printed on A3 format paper, divided into nine items with questions that guide the participant in the development of the business plan. The first versions of the Circular Business Plan were printed on sheet of paper with circle diameter measuring 60 centimeters.

The use of a large sheet of paper in drafting the Circular Business Plan was inspired by the Business Model Canvas. While the Business Model Canvas is directed to the elaboration of the management model and the understanding of the value created by the company, the Circular Business Plan is directed to the learning of the global understanding of a Business Plan of an innovative idea.

The Circular Business Plan is used to provide a transversal entrepreneurial experience, bringing students' competencies to the theme, organizing and developing ideas from key business planning points during the Building a Business Plan Workshop.

The Building a Business Plan workshop begins in an expository way with the teacher, challenging participants to plan business ideas from a variety of backgrounds. Next, it presents the concept of business plan, the objectives of the workshop and what is the Circular Business Plan. The participants form working groups for the development of the idea for one hour and thirty minutes. After the plans are built, the groups present their business ideas and receive suggestions for improvements from the other participating groups. Individually, participants indicate their perception of learning through self-assessment. The Workshop Building a Business Plan is completed with the projection of a video with entrepreneurial messages. After the workshop closes, the teacher evaluates the business plans built using the teacher evaluation tool.

The first workshops held in the year 2013, lasted 3 hours and 30 minutes (Sangaletti et al., 2013; Pinheiro et al., 2013). The results of these initial workshops, the perception of the idealizers and bibliographical revisions served for the idealizers of the Circular Business Plan to modify the titles of the items, establishing questions for the Circular Business Plan.

Currently, the workshops last 3 hours. The teacher's report was written to register the main doubts presented by the participants, the participant's self-assessment tool to indicate their perception of the learning regarding the entrepreneurial attitude, and the teacher's evaluation of the participants' business plan.

In the self assessment, workshop participants indicate their perception of the level of learning satisfaction in relation to the entrepreneurial attitude, demonstrated through the indicators Creativity and innovation, Market vision, Risk analysis, Autonomy and independence, Planning skills, Taking decisions,

motivation and initiative, and teamwork. Participants' perception is indicated following a scale of grades from totally dissatisfied with learning (note 1), partially dissatisfied with learning (2), partially satisfied with learning (3) until fully satisfied with learning (4).

In the evaluation of the teacher, the teacher's satisfaction with the answers to each of the items in the Circular Business Plan (Opportunity, Company, Products and Services, Market, Environment, Production and Operations, Marketing and Sales, and Team) is indicated in scale of notes from totally dissatisfied with the response (note 1), partially dissatisfied with the response (2), partially satisfied with the response (3) until fully satisfied with the response (4).

Workshops were carried out at a technical and higher education institution. Building a business plan using the Circular Business Plan in the first half of 2014. From these workshops, it was possible to collect data (Pinheiro & Ferreira, 2014a). The results and interviews with professors specialized in the area of entrepreneurship have served as a basis for the improvements proposed in the Circular Business Plan, as well as in the Workshop Building a Business Plan (Pinheiro & Ferreira, 2014b).

The updated Circular Business Plan is presented in Figure 1.

The items and respective issues of the Circular Business Plan are presented below:

- Opportunity: What is your business idea? What is the innovation of this idea? What is the name of the business idea? How will this idea be economically, socially and environmentally sustainable?
- Company: What is the mission, vision and values of your business idea? What is the kind of enterprise of the business idea? What are the strengths and weaknesses of your business idea?
- Products and Services: What are the characteristics of all products and services offered?
- Consumer: What expectations of consumers does the business idea intend to meet? Who will be the people who will buy your products and services?
- Environment: What are the market opportunities that favor the idea? What are the Market Threats that undermine the idea? Who will be and what are the characteristics of the direct and indirect competitors?

Figure 1. Circular Business Plan.

- Production and Operations: What are the stages of production and delivery of services from suppliers to the consumer?
- Marketing and Sales: Which phrase can communicate your business idea? How and where will the products and services be disclosed? What is the estimated price and quantity of your products and services?
- Team: What are the positions needed to carry out the idea? What are the functions of each manager of the business idea?
- Finances: How much will the initial investment be? Who will be the investors? What will be the operating expenses?

This Circular Business Plan was used in Workshops Building a Business Plan that took place in the second half of 2014 and early 2015, serving as information for new evaluations. Ten workshops held at the same teaching institution were analyzed, with 160 participants developing 48 business ideas developed by groups with 3 people, on average. Most participants have high school (88%). Regarding the Workshops Building a Business Plan, 60% of these were carried out with students of free courses and 30% were held in classes

of technical courses. All Workshops Building a Business Plan were carried out during the teaching of entrepreneurship in subjects directed to the theme.

#### 4 Analysis of results

In the Workshops Building a Business Plan carried out in the second half of 2014 and beginning of 2015, 149 participants answered the self assessments, assigning grades from 1 to 4, the grades were summed up, the percentage of each one being of the indicator, and is presented in Table 1.

It is observed in Table 1 that the participants' perception of total or partial satisfaction of learning predominates in all the indicators of the entrepreneurial profile.

The following indicators can be highlighted in the results: Teamwork with 97% of "Completely satisfied with learning" (Endnote 4) and "Partially satisfied with learning" (Endnote 3); Creativity and innovation; and Motivation and initiative both presented 96% satisfaction with learning.

"Totally dissatisfied with learning" (Endnote 1) reached only 3% in the indicators "Risk analysis" and "Autonomy and independence".

Two teachers assigned scores of 1 to 4 for the 48 business ideas elaborated by workshop participants, and the percentage of each grade in relation to the

Circular Business Plan	863
------------------------	-----

Self-assessment of participants	4	3	2	1	Total
Innovation and creativity	58%	38%	4%	0%	100%
Market vision	37%	48%	14%	1%	100%
Risks analysis	30%	49%	19%	3%	100%
Autonomy and independence	44%	47%	6%	3%	100%
Planning skill	42%	47%	11%	0%	100%
Make decision	55%	39%	5%	1%	100%
Initiative and motivation	65%	31%	4%	0%	100%
Team work	80%	17%	3%	0%	100%

**Table 2.** Teacher evaluation of the satisfaction level of the answers.

Teacher evaluation	4	3	2	1	Total
Opportunity	68%	20%	12%	0%	100%
Company	33%	43%	22%	2%	100%
Products and services	55%	37%	5%	2%	100%
Market	76%	20%	4%	0%	100%
Environment	72%	24%	3%	1%	100%
Production and operations	74%	20%	6%	0%	100%
Marketing and Sales	75%	24%	1%	0%	100%
Team	73%	21%	6%	0%	100%

total grades assigned for each item in the Circular Business Plan, as presented in Table 2, was calculated.

In the evaluation of teachers, "Marketing and Sales" stands out with 99% of total and partial satisfaction with the participants' answers. Following, "Market" and "Environment" present 96% satisfaction with participants' responses.

Relating the teachers' evaluations to the self assessments answered by the participants, it is possible to observe that:

- The best evaluated item by the teachers, "Marketing and Sales" requires an entrepreneurial profile focused on Creativity and Innovation, an indicator of self evaluation with 96% satisfaction in relation to learning;
- The "Teamwork" indicator, highlighted in the self-assessment, is related to the profile necessary for the elaboration of the "Market" and "Environment" items, which received satisfactory evaluation in 96% of the answers;

These results demonstrate the possibility of using the Circular Business Plan in the teaching of entrepreneurship, specifically for the construction of Business Plans. However, new analyzes of this tool can still be performed for improvement, reaching higher satisfaction percentages in relation to participants' learning.

#### 5 Conclusion

The objective of this study was to analyze the Circular Business Plan as an active methodology for teaching entrepreneurship during the Workshop Building a Business Plan. Thus, the analysis of the participants' perceptions of the Workshops Building a Business Plan, as well as the evaluations of the teachers demonstrated the possibility of this active methodology to contribute to the development of the entrepreneur profile, based on competences, different knowledge, skills, attitudes and values.

The Circular Business Plan presented and analyzed in this work is a result of improvements implemented from the students' self assessments, teacher evaluations and interviews with the specialists.

The teachers 'satisfaction with the responses of the participants in the Circular Business Plan items and the participants' perception of learning through self-evaluation in this work show that the Circular Business Plan can also be a tool capable of business ideas from key points of the business plan, identifying an opportunity and defining sustainable strategies.

In this sense, it is possible to emphasize that the self-assessment indicator answered by the participants "Totally dissatisfied with learning" (Endnote 1) reached 2% of the total scores in only two indicators. In the evaluation carried out by the teachers, total and partial satisfaction reached 99%, as occurred in the evaluation of the answers to the item "Marketing and Sales".

However, this research was limited to analyzing the use of the Circular Business Plan in specific groups of an educational institution, mostly with medium level of education, evaluations were carried out by only two teachers. Future research, through the analysis of new Workshops Building a Business Plan, will enable the improvement of this active methodology and improvements to the teaching of entrepreneurship, as well as contribute to the development of the entrepreneurial profile.

#### References

- Alberto, D., Silva, M. J., & Rodrigues, R. (2007). Ensino do empreendedorismo: análise comparativa em universidades estado-unidenses, europeias e Chinesas. In *Anais do IX Seminário Luso-Espanhol de Economia Empresarial*. Covilhã.
- Alperstedt, C. & Carvalho, A. P. (2006). Business plan competition: an alternative methodology to promote entrepreneurship. In *Internationalizing Entrepreneurship Education & Training Conference - IntEnt2006*. São Paulo: Fundação Getúlio Vargas - FGV/SP.
- Andrade, M. M. (2009). *Introdução à metodologia do trabalho científico* (9a ed.). São Paulo: Atlas.
- Andreassi, T., & Fernandes, R. (2010). O uso das competições de planos de negócios como ferramenta de ensino de empreendedorismo. In R. M. A. Lopes (Org.), *Educação Empreendedora: conceitos, modelos e práticas* (1a ed.). Rio de Janeiro: Editora Campus.
- Barringer, B. R., & Bluedorn, A. C. (1999). The relationship between corporate entrepreneurship and strategic management. *Strategic Management Journal*, 20(5), 421-444. http://dx.doi.org/10.1002/(SICI)1097-0266(199905)20:5<421::AID-SMJ30>3.0.CO;2-O.
- Bizzotto, C. E. N. (2008). Plano de negócios para empreendimentos inovadores. São Paulo: Atlas.
- Cás, D. (2008). Manual teórico-prático para elaboração metodológica de trabalhos acadêmicos. São Paulo: Editora Ensino Profissional. 236 p.
- Coelho, M. C., Ribeiro, M. L., Oliveira, A. F., Rosa, A. C. B & Fowler, F. R. (2012). Criando empreendedores através de novas técnicas de ensino: um estudo de caso em uma escola de ensino fundamental. In Anais do Encontro de Estudos sobre Empreendedorismo e Gestão de Pequenas Empresas Florianópolis: AGEPE.
- Crissien C., J. (2011). Enseñando entrepreneurship creación de empresas: estrategias pedagógicas para despertar el espíritu empresarial. *Revista Escuela de Administración de Negocios*, 71, 100-125.
- Dolabela, F. (2004). Pedagogia Empreendedora. *Revista de Negócios*, 9(2), 127-130.
- Dolabela, F. (2008). O segredo de Luísa: uma idéia, uma paixão e um plano de negócios: como nasce o empreendedor e se cria uma empresa. São Paulo: Sextante.

- Dornelas, J. C. A. (2012). Empreendedorismo: transformando ideias em negócios. (4a ed.). Rio de Janeiro: Elsevier.
- Dornelas, J. C. A., Timmons, J. A.; Zacharakis, A. & Spinelli, S. (2008). *Planos de negócios que dão certo: um guia para pequenas empresas*. Rio de Janeiro: Elsevier.
- Faltholm, Y., Abrahamsson, L., & Kallhammer, E. (2010). Academic entrepreneurship: gendered discourses and ghettos. *Journal of Technology Management & Innovation*, 5(1), 51-63. http://dx.doi.org/10.4067/S0718-27242010000100004.
- Ferreira, D., Freire, D., & Portes, M. (2009). A prática do empreendedorismo no ensino superior e a aproximação da universidade com o mundo do trabalho: o caso Oriente Agência de Orientação Empresarial da Metodista de Minas. Belo Horizonte: Centro Universitário Metodista de Minas.
- Friedlaender, G. M. S. (2004). *Metodologia de ensino*aprendizagem visando o comportamento empreendedor (Tese de doutorado). Universidade Federal de Santa Catarina, Florianópolis.
- Gartner, W. B. (1988). Who Is an Entrepreneur? Is the Wrong Question. *American Journal of Small Business*, 13(4), 47-68.
- Gil, A. C. (2008). Como elaborar projetos de pesquisa. (4a ed.). São Paulo: Atlas.
- Global Entrepreneurship Monitor GEM. (2014). *Empreendedorismo no Brasil*. Curitiba: IBQP.
- Guerra, M. J., & Grazziotin, Z. J. (2010). Educação empreendedora nas universidades brasileiras. In R. M.
   A. Lopes (Org.), Educação empreendedora: conceitos, modelos e práticas. Rio de Janeiro: Elsevier; São Paulo: Sebrae.
- Henrique, D. C., & Cunha, S. K. (2008). Práticas didáticopedagógicas no ensino de empreendedorismo em cursos de graduação e pós-graduação nacionais e internacionais. *Revista de Administração Mackenzie*, 9(5), 112-136. http://dx.doi.org/10.1590/S1678-69712008000500006.
- Holm, S. (2011). *Plano de negócios em sete etapas*. (1a ed.). Curitiba: Ibpex.
- Josien, L., & Sybrowsky, J. (2013). Teaching entrepreneurship in action: using ebay as an educational tool. *Journal of Entrepreneurship Education*, 16, 1-14.
- Kirby, D. A. (2002). Entrepreneurship education: can business schools meet the challenge? In *Annnals of* XLVII World Conference, International Council for Small Business. San Juan: International Council for Small Business.
- Lakatos, E. M., & Marconi, M. A. (2010). Fundamentos de metodologia científica. (7a ed.). São Paulo: Atlas.
- Lange, J. E, Bygrave, W. D. & Evans, T. (2004). Do business plans competitions produce winning businesses? In *Babson-Kauffman Entrepreneurship Research Conference*. Scotland: Babson College.

- Lavieri, C. (2010). Educação... empreendedora? In R. M. A. Lopes (Org.), Educação empreendedora: conceitos, modelos e práticas (pp. 1-16). Rio de Janeiro: Elsevier; São Paulo: Sebrae.
- Lenzi, F. C. A nova geração de empreendedores: guia para elaboração de um plano de negócios. São Paulo: Atlas, 2009.
- Lima, L. M. E. S, Campregher, C. L., Hoeltgebaum, M., & Machado, D. D. P. N. (2006). A Importância do Plano de Negócios no Ensino de Empreendedorismo nas IES. In Anais do VI Colóquio Internacional sobre Gestão Universitária na América do Sul (pp. 1-15). Blumenau: Inpeau.
- Lopes, F. (2014). Direto ao ponto. *Comércio & Serviços*, 31, 56-59.
- Nakagawa, M. (2011). Plano de negócio: teoria geral. Barueri: Manole.
- Osterwalder, A., & Pigneur, Y. (2010). *Business model generation*. New Jersey: John Wiley & Sons.
- Pardini, D. J., & Santos, R. V. (2008). Empreendedorismo e interdisciplinaridade: uma proposta metodológica no ensino de graduação. *Revista de Administração da FEAD-Minas*, 5, 157-172.
- Pesce, B. (2012). A menina do vale: como o empreendedorismo pode mudar sua vida. Rio de Janeiro: Casa da palavra.
- Pinheiro, C. R. M. S., & Ferreira, F. M. (2014a). O plano de negócios circular como instrumento de ensino do empreendedorismo. In *Anais do XXI Simpósio de Engenharia de Produção - SIMPEP* Bauru: SIMPEP.
- Pinheiro, C. R. M. S., & Ferreira, F. M. (2014b). Análise e proposta de melhorias do plano de negócios circular como instrumento de ensino do empreendedorismo. In *Anais do III Encontro Senac de Conhecimento Integrado: empreendedorismo, inovação e mercado de trabalho*. Bauru: SENAC.
- Pinheiro, C. R. M. S., Ferreira, F. M., & Sangaletti, A. P. (2013). Ensino de empreendedorismo para professores e alunos utilizando o plano de negócio circular. In *Anais* do II Encontro Senac de Conhecimento Integrado. Bauru: SENAC.
- Rosa, C. A. (2011). Como elaborar um plano de negócio. Brasília: SEBRAE.
- Salim, C. S., Hochman, N., Ramal, A. C. & Ramal, S. A. (2005). Construindo plano de negócios. (3a ed.). Rio de Janeiro: Elsevier.

- Sangaletti, A. P., Pinheiro, C. R. M. S., & Ferreira, F. M. (2013). Formação de professores para o ensino de empreendedorismo na educação profissional. In *Anais do VII Seminário sobre a produção do conhecimento em Educação Política Educacional do Século XXI: paradoxos, limites e possibilidades* (pp. 796-799). Campinas: PUC.
- Santos, D., Caseiro, N. (2012). Empreendedorismo em instituições de ensino superior: um estudo de caso. In Anais do XIV Workshop APDR, Empreendedorismo e Desenvolvimento Regional. Setúbal: Instituto Politécnico de Setúbal.
- Schumpeter, J. A. (1985). Teoria do desenvolvimento econômico: uma investigação sobre lucros, capital, crédito, juro e o ciclo econômico (2a ed.). São Paulo: Nova Cultural.
- Seikkula-Leino, J., Ruskovaara, E., Ikavalko, M., Mattila, J., & Rytkola, T. (2010). Promoting entrepreneurship education: the role of the teacher? *Education + Training*, 52(2), 117-127. http://dx.doi.org/10.1108/00400911011027716.
- Sequeira, S. V. (2005). Intra-empreendedorismo em organizações não-governamentais como prática de gestão e como legitimação: estudo de caso da Ong Refazer. In Anais do XXIX Encontro da Associação Nacional de Pós-Graduação e Pesquisa em Administração. Brasília: Anpad.
- Stokes, D., Wilson, N., & Mador, M. (2010). *Entrepreneurship*. Hampshire: Cengage Learning.
- The U.S. Small Business Administration SBA. (2014). Create Your Business Plan. Recuperado em 11 de abril 2014, de http://www.sba.gov/category/navigation-structure/starting-managing-business/starting-business/writing-business-plan
- Todorovic, Z. W. (2004). The framework of static and dynamic components: an examination of entrepreneurial orientation and university ability to teach entrepreneurship. *Journal of Small Business and Entrepreneurship*, 17(3), 300-316.
- Vicenzi, S., & Bulgacov, S. (2013). Fatores motivadores do empreendedorismo e as decisões estratégicas de pequenas empresas. Revista de Ciências da Administração, 15(35), 208-221. http://dx.doi.org/10.5007/2175-8077.2013v15n35p208.
- Vieira, M. M. F. (2006). Por uma boa pesquisa (qualitativa) em administração. In M. M. F. Vieira & D. M. Zouain. *Pesquisa qualitativa em administração* (2a ed., Cap. 1, pp. 13-28). Rio de Janeiro: FGV.