


# Crowdfunding for Entrepreneurial Education: A Classroom Exercise in a Business School

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## ABSTRACT

This paper applies the concept of a crowdsourcing campaign in the context of entrepreneurial education, and reports the perception of participants in such application in a large business school. The classroom task is to prepare a crowdfunding campaign for their university in a freely available digital platform, having identified a relevant problem on campus. The problem identification is based on market research, where problems disrupting the school are found. To implement student's developed "solutions", crowdsourcing campaigns are created to expose ideas to market validation, and nudge students to communicate with customers and suppliers. The 'successful' perceptions of participants signal a large potential for this 'exercise', as campaigns can be successful, leading to the creation of micro-organizations to run these projects and impact communities positively. Of course, future research should establish correlation between crowdsourcing campaigns and likelihood of starting businesses and social ventures.

## KEYWORDS

Active Learning, Crowdfunding, Entrepreneurship,, Entrepreneurship Education, Higher Education

## INTRODUCTION

Entrepreneurial education is commonly seen as a vector to improve the level of entrepreneurial intention (Martin et al. 2013) and entrepreneurial activity (Aparicio et al. 2019). In higher education, this theme has gained prominence since 2001, having surpassed the mark of 400 scientific papers (Fernández-Portillo 2018). Although the field of studies has emerged mostly focusing on general themes associated with entrepreneurial education, since 2007 its focus has shifted to specific themes, such as "entrepreneurship learning, entrepreneurship intention, higher education and provocation" (Aparicio et al. 2019, p. 111). Among the emerging research gaps for the 2020s, we elect the challenge of promoting studies that investigate pedagogical models and their perceptions on entrepreneurial,

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undergraduate education (Nabi et al. 2017). We also follow Ferreira et al. (2018) on the claim that information technology (IT) is pervasively present on people's lives and tasks nowadays, thus requiring instructors to use these tools to implement their teaching methods in class.

In this study, we contribute to entrepreneurial education by developing and validating a classroom crowdsourcing exercise in a business school, implemented via freely available crowdsourcing platforms. Considering our results, we expect future researchers to establish comparisons with further cases in comparative research designs, such as Crammond (2019).

Entrepreneurial education is considered a strategic tool for regional development and the generation of entrepreneurial universities is one of the most prominent themes in the literature (Galvão et al. 2018). Through entrepreneurial education, students develop "financial literacy, management skills, ability to take responsibility and make decisions, competitiveness, perseverance, ability to network and make contacts and ability to research effectively" (Adamu, 2019, p. 211). Considering entrepreneurial education and its current challenges, studying the impacts of technology on teaching and learning strategies stands out. This is a topic of interest for our study.

In recent years, the implementation of new teaching and learning strategies has become more prevalent (Broadbent & Poon 2015; Claxton et al. 2006). Teaching, learning, and research in higher education institutions nowadays do not stop at the boundaries of campus and classroom any more due to the emergence of technologies that facilitates social online interactivity and collaboration between people around the world. This technological context creates the ideal opportunity for a "costless" digital, internet-based entrepreneurship where students efforts can concentrate on applying the concepts and tools they are learning (Nambisan 2017). Although this pedagogical exercise here presented is focused on strategic (Miller & Friesen 2008) and entrepreneurial theory (Malhotra et al. 2017). There are good reasons to believe the same or a similar exercise could be adopted on any course in the broad applied sciences spectrum (Solomon, 2013).

Unlike traditional means of soliciting capital, where the entrepreneur presents his idea to a narrow and sophisticated group of investors, crowdfunding allows entrepreneurs to apply for internet funding to a large number of people, where each individual contributes only with a small amount to reach the established goal (Belleflamme et al. 2014; Greenwald 2012).

Teachers in higher education are slowly accepting the fact that they have to become more professional in their approach to teaching, matching their professionalism in research (Laurillard, 2014). There is also a growing recognition that the technological media have the potential to improve student learning, or at least teach efficiency, and university teachers are looking for ways of increasing their understanding of what can be done with the new media, and how to do it. Collaborative technology and social media play a central role in the communication among university students nowadays (Shen et al., 2017). These are the questions explored in this paper.

This classroom exercise outlines a project created for an undergraduate course that deals with social contexts of entrepreneurship. The activity asks the students to prepare a crowdfunding campaign for the University of Brasília (UnB). The project is based on field research within UnB, where students gain a better understanding of the challenges and visibility of problems that disrupt this type of organization. In addition, the exercise is based on activities inside and outside the classroom, which encompasses innovative trends in entrepreneurship teaching, bridging the gap between theory and real life.

The objective of this pedagogical exercise is to develop practical skills -sharing skills and collaboration when dealing with time-limited project with peers; practice the theories and tools learned during the semester in the subject in real situations and create new opportunities for students and scholars to follow trends in the educational environment.

The pedagogical value of this exercise refers to students who create an entrepreneurial action with an organization within an environment with limited resources, which motivates the design of innovative crowdfunding campaigns and sympathizes with the entrepreneurial demands of social/

cultural organizations. Cultural, social and creative problem-solving skills to work in multidisciplinary teams around crowdfunding can be expected as results.

The next section provides more information about crowdfunding aspects. Then, the methodology is outlined, and the preliminary findings are discussed. This paper ends with an overview of the classroom exercise applied.

## LITERATURE REVIEW

### Crowdfunding

Crowdfunding is an English word whose meaning is the combination of two words: “crowd” meaning “people” and “funding” meaning financing. Crowdfunding, also known as collective financing, is the practice of funding an idea or project soliciting a wide range of potential monetary contributors via the Internet (Mollick 2014). Originally created in the United States, crowdfunding is used in many countries as a tool to raise funds for various purposes, such as cultural and social events.

Most of the current crowdfunding models work as follows (Riffel 2016):

1. Any person registered on the site can view the proposed projects and allocate resources for the selected projects;
2. If a stipulated minimum value is reached, the amount raised is transferred to the project;
3. With the transfer of funds for the project, usually a fee is charged by the site;
4. The transfer of funds to the project usually results in some type of non-monetary compensation for those who contributed, such as gift kits or tickets to the event. In some of the sites, there is public recognition for the help, done on the site itself or on other social media such as Twitter and Facebook. Social media became part of the strategy in each and every industry, especially universities as their potential students browse for school selection online (Kumar et al., 2019). The reward comes down to acknowledgement to those who have supported, through mention in some way in the project itself, in social media, etc.

In short, crowdfunding is a model fed by three participants: the initiator of the project, who proposes the idea or project to be funded, the individuals or groups that support it, and the organization or platform that brings together the parties to launch the idea. In this classroom exercise, the initiator will be the students registered in the subject Organizational Strategy and each group should analyze the advantages and disadvantages of each platform and choose whatever they want.

Crowdfunding projects are also classified according to the functioning between flexible or all-or-nothing. In flexible projects, the project receives funds that are allocated to the project during the given time, regardless of whether a predefined goal is achieved. For all-or-nothing projects, the project receives the funds only if the previously set minimum collection goal is reached within the

Stipulated time frame for collection. In this modality, if the objective is not reached, the contributions are returned to the supporters (Cumming et al. 2015) only the all-or-nothing modality was allowed to avoid the funds to be used for other purposes. In this classroom exercise, to avoid the funds to be used for other purposes, only the all-or-nothing modality was allowed. only the all-or-nothing modality was allowed to avoid the funds to be used for other purposes.

### Technology in Higher Education

As a result of the 4th Industrial Revolution, teaching has undergone significant changes, with the result that it is necessary to engage students not only through expository and dialogic classes, but also through the development of projects that contemplate the application of theoretical and practice (Baygin et al. 2016). In this context, Ferreira et al. (2018) says that there is no other area more central

than computer science, which became a backbone for most areas of research, as well an indispensable apparatus of devices for our daily lives.

The insertion of technology, innovation and entrepreneurial education are also part of this new scenario and aims to make it possible to establish meaning regards student training (Lee and Trimi 2018). Innovations in education are regarded, along with the education system, within the context of a societal supersystem demonstrating their interrelations and interdependencies at all levels (Serdyukov 2017). This is important because most business today involves some form of information system. Ferreira et al. (2018) argue that because of this large variety of topics relevant to technology education, and continuing integration of these technologies in other courses, the importance of doing research on such endeavors is established. Even students who do not choose IS courses know they cannot avoid IT altogether, giving educators an opportunity to expose them to a broader conception of IS and its uses beyond hardware and software.

Information systems are responsible for enabling crowdfunding and an in-deep understanding about this topic helps to develop better solutions for the effective and efficient utilization of this new way of funding (Haas et al. 2014). In this sense, crowdfunding is an excellent resource for securing much-needed funding for educational projects, enabling higher education institutions to be at the forefront of education and research innovation, and prepare members in these institutions including students, staff, researchers, lecturers and administration for the online world challenges (Solemon et al, 2013).

## METHODS

This is exploratory research employing mixed methods to examine the understandings, experiences and perspectives that students have about the crowdfunding exercise. An online questionnaire (open and closed questions) was used to survey the students analyzed via thematic analysis.

## STUDY CONTEXT

According to Chaui (2003), the university is a social institution and as such expresses in a determinate way the structure and mode of functioning of society as a whole. For Castells (1999) and (Lemos et al. 2009), universities have an economic role in society, being seen not only as a propeller of economic development, but also as a fuel to increase individual chances of insertion in the labor market and increase the employability of individuals in a scenario of unemployment.

This classroom exercise was designed to immerse the UnB students in a scenario where they can deepen their understanding of entrepreneurship related to real life challenges. The University of Brasília, according to the Institutional Development Plan (PDI) 2018-2022, has 119 undergraduate courses, among courses with a baccalaureate degree. Of the total, 107 courses are face-to-face and 12 distance courses. In terms of postgraduate studies, UnB has 86 master's degrees and 66 doctoral courses. The undergraduate students of the UnB of the different courses and training areas have a good insertion in the labor market, highlighting both in the private sector and in the public services, obtaining employment opportunities in all regions of the country (Coelho & Cabello 2018).

Supporters seek personal satisfaction in supporting a cause, seek to collaborate with the project where the cause is aligned with their personal beliefs and values (Gerber et al. 2012). In the case of the University of Brasília, because it is a social institution with an important educational role in the local region, social motivation should be linked to the pleasure of participating in the realization of a project, once one of the main reasons that lead people to contribute to collective financing projects is to help others or to support a noble cause.

The mentioned discipline has three categories of participants: compulsory, optional and free module. The subject is part of the curriculum, but it is not mandatory for the training of the students of

this course. Finally, there are four students enrolled in the last case who understands in the diversified choice of subjects regardless of their course at the University. It is worth fomenting that this choice is conditioned to a limit of disciplines previously stipulated by each department. Among this last circumstance, there are the courses Collective Health Management and International Relations.

According to (Blume et al. 2010), the type of participation - voluntary or obligatory - influences the performance of participants during training events. In addition, this individual motivation is a key factor in explaining student achievement better, since more motivated students tend to use more frequently trained skills.

So, there is a great potential for the use of a crowdfunding campaign of the university itself, both as a tool to approach students to entrepreneurship and as a means to leverage university development with the active participation of students.

### The Classroom Exercise

In this exercise, students were asked to carry out field research and identify a problem faced by UnB due to lack of funds (e.g., lack of adequate infrastructure, lack of equipment, inequality social, campus violence). The students were offered a schedule of activities to be carried out in 5 weeks. The details of the activities are better described in Table 1.

The activities cover a period of 5 weeks culminating in the presentation of 11 crowdfunding campaigns (Table 2). The results of this work were obtained by the analysis of an online questionnaire that had its answers filled by students participating in the course. We obtained 36 answers of the 44 students enrolled in the subject (86%).

In short, in week 1, before field research, instructors taught the class about crowdfunding models, associated theories, and examples of successful campaigns. At the end of the lecture, students reflect on the academic material before field research. In Weeks 2 and 3, the groups decided which platform to use to launch the campaign. At weeks 4 and 5 students completed the campaigns and wrote a report of the main results of the work.

Instructors have helped students recognize that the outcome of a crowdfunding campaign is uncertain and sometimes risky in terms of reaching their financial goals (Mollick 2014). However,

**Table 1. Schedule of Activities**

Week	Activities
1 <sup>a</sup>	The instructors taught the class about crowdfunding models, associated theories and examples of campaigns. At the end of the class, students organize themselves into a group of no more than 4 students and receive academic material.
2 <sup>a</sup>	The groups performed the field research in the University dependencies and selected a problem to perform the virtual campaign.
3 <sup>a</sup>	Students choose the platform and launch their campaigns.
4 <sup>a</sup>	The groups held presentations in the classroom in a maximum of 10 minutes. Presentations should highlight the chosen project, videos, awards, social media strategy and community engagement, including outreach support from collaborations with local businesses and government entities. Students should make their presentations as if they are addressing potential supporters.
5 <sup>a</sup>	Students closed their campaigns and wrote a report of no more than 3 pages, which should contain the following elements: (1) Identify the problem chosen and why; (2) Identify the type of crowdfunding used and why; (3) Explain the strategic choices for the campaign and which social media were used; (4) Identify which key contributors have impacted the outcome of the campaign; (5) Describe the result of the campaign (whether it ended or not, how many days it worked, whether it worked or not, how much was raised so far ...); (6) What will be the final destination of the resources if the campaign works (buy something, make a donation to the rectory ...)?; (7) Describe how accountability will be for taxpayers in collective financing.

**Table 2. Crowdfunding Campaigns**

Groups	Crowdfunding Campaign	Character of the problem	Platforms
Group 1	Shelter for UnB mothers	Social	Catarse.me
Group 2	UnB campus is yours	Infrastructure	Catarse.me
Group 3	We want security in UnB Campus	Security	Kickant.com
Group 4	Course of personal defense at UnB	Security	Kickant.com
Group 5	Collective cleaning of UnB campus	Human Resource	Kickant.com
Group 6	Safety on campus, learning for life	Security	Kickant.com
Group 7	Opportunity x Student x UnB	Social	Kickant.com
Group 8	Shortage of lamps at the University of Brasília	Infrastructure	Kickant.com
Group 9	Lighting Improvement at UnB	Infrastructure	Kickant.com
Group 10	Vermifugation and sterilization of UnB cats	Public Health	Kickant.com
Group 11	Infrastructure of the University of Brasília	Infrastructure	Vakinha.com

we also explain that individuals and organizations continue to engage in crowdfunding because there is always a chance for success, including the aspiration to build a project-based community that is necessary for promoting products and projects within a specific market.

## RESULTS

Among this sample, in terms of gender, 25 students are male (70%) and 11 are female (30%). Still within this sample, there is the evaluation of age group with the following data: 17 people are aged between 18 to 20 years (47%), 13 people are 21 to 23 years old (36%), three are between 24 and 26 years old (8%) and three are above 26 years (8%). Finally, there are the graduations of the academics that are part of this process: 15 students are from the Management (42%), 10 are from Accounting (28%), 7 are from Tourism (19%), 3 are from Collective Health Management (8%) and only one is from International Relations (3%).

To carry out the final project of the discipline, the students were separated into teams. Thus, we had the composition of 11 groups, five of which were formed by four students, another five by three, and one by only one member. Among the students participating in the groups, we had 25 who had never attended any collective financing (70%), eight who did not even know what crowdfunding was about (22%), three who already had some experience in this type of funder activity or collaborator (8%). None had used this type of platform to start a project. Regarding the contribution of the final work, 31 people (86%) chose the option “The project contributed to my training,” five (14%) marked “I did not realize any contribution of the project,” and none said “The project only decreased the content needed for my training.”

When students were asked if they believed in the success of their campaign, 18 answered yes (50%) and 18 answered maybe (50%) and soon, no one answered “no”. Given this scenario, it is suggested as a learning strategy that the teacher, during the period of the classes and the project, can increase the level of self- efficacy of each student to obtain results of the activities better and better.

Regarding the development of problem-solving skills, 26 students answered “It was possible to identify and define problems, as well as develop solutions” (72%), six said, “It made it possible to think strategically about opportunities and results” (17%), four chose “Possible to elaborate and propose modifications in the processes of the University” (11%) and none that “did not allow the development of competence to solve problems.” It is worth mentioning, finally, that only one student

considered crowdfunding together with other financing alternatives that could be the realization of a sports championship. However, the same still needs to be done.

Table 2 below shows the 11 crowdfunding campaigns created by the students. Two groups used the platform Catarse, eight groups (majority) chose to launch their campaigns in Kickant platform, and only one group used the platform Vakinha. Shen, Yide, et al. (2017) highlight the importance of doing proper research before selecting the right tool to be implemented and used in class with the students, as this choice seems to be highly associated with the perceptions later observed.

About the character of the problem: 4 groups worried about Infrastructure; 3 groups worried about Security on Campus; 2 groups worried about Social Issues; 1 group worried about Human Resources and 1 group worried about Public Health.

Below are some of the students' responses when asked "why should the local community help UnB?":

*Because it is one of the best universities in Brazil, it has excellent teachers, but the structure of the university is lacking, which ends up hurting students a little, either because of lack of security, materials, among others. (Student 1)*

*Since one of the axes of the university is the extension that seeks greater community-university integration, the participation of the local community is necessary for the university to exercise its praxis. (Student 3)*

*Because besides being the educational reference point in Brasilia, its projects are extremely important social aspects. (Student 13)*

*Because it is a place that, although public, occupies significant significance in the lives of students and in which the state sometimes cannot meet all the needs or is not aware of the students' wishes, who perceive the information at the local level. (Student 15)*

*Although the government that should be responsible for the care of the university is remarkable that this has not been happening in the necessary way, therefore the support of the community demonstrates to society and the rulers the importance that the population gives to education. (Student 19)*

Throughout the above passages, students recognize the importance and relevance of the university, both in the local and international context, its relationship with the community, some of the problems it has been facing and the need for the contribution of the interested parties.

When participants quizzed on "How did you reconcile theory with practice to develop the crowdfunding strategy?" we got some answers below:

*Planning, developing and running the campaign. Looking for the most viable strategy, analyzing the scenarios, the economic reality of the country and balancing the proposal, so that it was not something unachievable. Observing the reality of the public attending UnB (Student 9)*

*Associating strategies to reach the target audience. Through what has been learned, show the stakeholders that the project was indeed important and feasible. (Student 10)*

*It was very interesting to develop a strategy of our company and implement it in real life, gave us different experiences. (Student 11)*

*We used part of the work that we had already done, for example, site, vision, mission of the company and also the knowledge we acquired besides thinking about a problem for the students that still had no solution. (Student 18)*

*It was with the theory that we were able to base ourselves to develop the crowdfunding strategy, which allowed us to separate between members what each one should do and focus on. The contents taught from the beginning to the end of the course were very important for the development of this project. (Student 23)*

*The main learning was the difficulty of thinking about bringing the whole theory to practice, which niche to attack, how to reach contributors, and what society would see as useful and valid to be invested. That is, we tried to use all the tips given in class to the best of our ability to develop crowdfunding. (Student 25)*

## DISCUSSION

Regarding the students who stated that they did not realize any contribution of the project, we found no relation to this statement and the gender, age, course, type of participation, project team, and previous experience in the subject or belief in the success of the project. Thus, we would need a larger sample so that we can identify why the students respond to this statement and evidence this study in more robust statistics. There is also the possibility of trying to identify individually - asking each student - about each person's experience in order to improve their experience in the discipline and to identify the factors that contributed to their responses. One of the possible justifications for the students to make this statement would be the need to reflect on the learning of the discipline (Chang et al. 2014). Because they may not have realized the importance of content in the present, but in the future, they may recognize the contribution of the project to their personal formation.

Bandura (1995), in his studies, emphasizes the importance of self-efficacy, that is, how much the individual believes that he can learn something that directly affects his performance. Chose the option "The project contributed to my training", 5 students (14%) scored "I did not realize any contribution of the project" and none said "The project only reduced the content needed for my training."

The primary marketing strategy of the students to publicize the crowdfunding campaign was ial media (Instagram, Facebook, WhatsApp, Belli's website). According to the literature (Schwienbacher and La and Larralde 2010), regarding the primary means of publicizing this type of campaign, some students reported in addition to the strategies adopted above, made the disclosure to friends and family, word of mouth and would put banners in some places of circulation of the academic community. According to the respondents' responses, the main funders of the campaign were the academic community (students, teachers and staff) and users of the crowdfunding platform.

Through the answers of the students, we can identify that they have been able to relate the theory of the discipline to the practice. Besides emphasizing the importance of the theory for the development of its project and experienced in a real way all the content taught in the classroom in the execution of this project, in addition to finding difficulties that contributed to the learning, because in providing the students with an outlet to appropriate their own learning, they can mature more quickly and better prepare for post- university life. The learning environment is a path that allows the exploration and generation of different fundraising opportunities (Gibb 2002; Rae 2003, 2009) in a relatively risk-free environment.

Although risk awareness is embedded in the project, the process of evaluating different options, creating unsuccessful value is not penalized, actual use in building and conducting a fundraising campaign exposes students to diverse and random events, therefore, creates a challenging and dynamic atmosphere that encourages students to be adaptable and to experiment (Pittaway and Cope 2007),



and to reconcile theory with practice and bring the university closer to the community. There is strong evidence from the literature that real projects are a powerful tool for making learning environments meaningful (Higgins & Simpson, 1997).

Regarding the evaluation, it is assumed that the act of evaluating implies collection, analysis and synthesis of the data that configure the object of evaluation, with a consequent action decision (Mendes 2005) and, as this author emphasizes, should not be limited only to the verification of learning, in terms of the correct results obtained in an evaluation, but the evaluation must have the formative character. Thus, the notes attributed to the work are not related to the success of the campaign (whether all the resources were collected or not), but to the process of launching the campaign.

## Field Research

For field research, we selected UnB for several reasons. First, it is an environment accessible to all students who will perform the activity. Second, a university is appropriate for an organizational approach, since it is a public higher education institution with didactic-scientific, administrative, financial and patrimonial management autonomy. Third, the legal nature of a university can be particularly conducive to a crowdfunding initiative, as its stakeholders (e.g., students, teachers, alumni, NGOs, government, society) are already aware of the importance of a university for society. Finally, it is intended to stimulate the social responsibility of students within the organization and the relationships established in their context, as well as the impact of their actions on society and the environment.

In addition, the campus is a factor worthy of attention when considering student engagement, because students do have a sense of belonging on campus that is related to engagement and even retention (Lefever 2012). Therefore, this raises practical implications for institutions in terms of how to organize and develop campus space and activity to help foster belonging and community, suggesting that it would be beneficial to consider access to participation and involvement through campus spaces and opportunities in order to enhance engagement and feelings of inclusion and belonging (Lefever, 2012).

Thus, the university must have the sensitivity to observe the social context in which it is inserted, being able to apply the theory of studies developed to social practice; be committed to reality and promote social transformations. It should also prepare and improve students' technical knowledge of the market reality.

With that in mind, our objective was to offer concrete opportunities for students to improve their cultural, social and creative problem-solving skills inside the campus. Students should use the crowdfunding project as an entrepreneurial advantage to gain maximum involvement with local communities and demonstrate solidarity or support from key actors. In addition, the exercise compels the students to identify the main contributors to their campaigns, using stakeholder theory, one of the mandatory subjects for the Organizational Strategy course.

## CONCLUSION

This paper discusses the use of a new pedagogical approach in a curricular unit related to entrepreneurship where students develop crowdfunding campaign projects to apply conceptual and practical knowledge to real-life situations, contributing to use of digital platforms in class-room exercises. Our outcomes make open doors for future research to comprehend the real effects these campaigns can have on understudies' execution and contribute to the focus organization.

Entrepreneurs and business teachers are invited to develop experiences that incorporate work into teams and the creativity of students with hands-on activities that promote learning and develop entrepreneurial skills. Although this academic exercise here is concentrated on strategic and entrepreneurial theory, there are valid justifications to trust the equivalent or a comparative exercise

could be embraced on any course in the expansive connected sciences range. This learning innovation exercise has already been applied in other contexts or similar organizations that aim to develop new initiatives that can be financed collectively to improve the visibility and connection of organizations with the community around them.

Today's learners exist in a digital age, implying access to, and use of, a range of social networking tools and software providing gateways to a multiplicity of interactive resources for communication, information and entertainment. Instructors can expect a positive classroom experience because of the opportunity to integrate academic material and praxis into a social context. Therefore, this exercise can be advantageous for other courses that deal with the multifaceted dynamics of the social contexts of entrepreneurship. It allows educators to teach students about the social context of entrepreneurship through field research and a crowdfunding activity. Field research experience can increase students' awareness of the cultural and social role played by organizations and the business options that can influence their sustainability. Besides that, the exploratory validation methods signals that student involvement with the community increased after the exercise, something very positive for their professional development and society welfare.

The integration of simple information technology tools, such as the crowdsourcing platforms freely available online, can be favorably used by instructors of all areas of knowledge. Students can always be invited to 'discover' relevant problems for their local communities, as seen from the perspective associated with the course content. These digital platforms can bridge the gap between the classroom and society, providing technological ground for applying modern educational methods: active and collaborative towards problem-solving. Also, by releasing their campaigns, the students can taste what their audience thought about what they developed as an 'innovative idea.' This is real first-stage market validation, which can lead to revisions through interactivity among stakeholders of their projects. Many opportunities may arise in such a context.

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