

## Teachers' opinion about sustainability on management education

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### Abstract

*Business Schools are making efforts to align their faculty to sustainability market demands. PRME - Principles for Responsible Management Education is a United Nations project to support business schools in educating managers with social and environmental issues conscious. The purpose of this study was to identify the faculty vision regarding to sustainability and PRME Project in Fagen - Faculty of Business and Management at Federal University of Uberlândia - Brazil. A descriptive research with a a semi structured questionnaire with 34 teachers from Fagen took place and was complemented by a focus group with eight teachers and a master student. As a result it was revealed that teachers have a concern with sustainability and believe it is very important to manager education, at the other side they have low engagement with sustainability projects and low familiarity with PRME objectives.*

**Key words:** Sustainability; Management education; Principles of responsible management education



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### INTRODUCTION

Sustainability has been discussed in various areas, especially business and academic, but began to gain ground from the United Nations Organizations (UN) Conference in Stockholm, which took place in 1972 and its development in the Brundtland Report in 1987, from then the social, economic and environmental aspects are now considered in studies complementing environmental issues.

According to Pires (2011), the involvement of people prepared in environmental projects is relevant, because sustainability has proven to be a practice that requires both change the positioning of organizations as in the placement of employees.

The labor market is increasingly seeking professionals trained in sustainability. Over the coming years, the demand for professionals able to consider this parameter in your work will grow exponentially because every dimension of human life will go through this requirement (Extra Globo, 2015).

Environmental education can be understood as a way of concepts classification and values recognition. It aims to develop skills and change attitudes in a way that students can understand interrelationships between humans, their culture and their biophysical means. It can be considered as a practice of making decisions to improve the life quality (Ministry of Environment, 2015).

According to Baccharin et al. (2015) because of the universities role to society, it should be the first to be concerned with sustainability by a simple consistency posture. Universities are guided by their special mission to teach and train the leaders of tomorrow; for its rich and extensive experience in conducting transdisciplinary research, overcoming the traditional boundaries between disciplines-based departments, and its fundamental nature of knowledge engines, universities have an important role to play in the world... an indispensable role (UNESCO, 1998, p.6).

In order to help universities and other educational institutions, UN in partnership with some business schools created the Project Principles for Responsible Executive Education (PRME). The goal is to guide educational institutions on management education with social and environmental concerns (PRME, 2015). The Principles of Responsible Management Education (PRME) is the first organized relationship between the United Nations and academic management institutions, business schools and universities. Since its official launch in 2007 by the UN Secretary -General Ban Ki -Moon, the initiative has grown to over 500 leading business schools and academic institutions for more than 80 countries worldwide. More than a third of the 100 best business schools in the Financial Times are signatories.

The Faculty of Business and Management of the Federal University of Uberlândia (Fagen- UFU) was established on 1969 it aims to develop teaching and research in management and business and education

focused on the Brazilian economic development (Fagen , 2015). When starting actions to promote sustainability in Fagen a research question comes up: what is the opinion of teachers about sustainability? Which are the priorities actions needed on Fagen? Among this, this research aims to identify the teachers' opinion regarding to sustainability and its implications of PRME Project at Fagen-UFU.

### LITERATURE REVISION

Sustainable Development concept came in 1942 at UN through an alliance signed between twenty-six nations in Washington, in the United States. The main objectives were: to maintain international peace; ensure human rights; promote the socioeconomic development of nations; encourage the autonomy of dependent ethnic groups; make stronger links between sovereign countries (Braga, 2013). Currently UN adds nearly all independent and peaceful countries, containing the number of 191 members. The Organization remains open to admit States within the limits of the provisions of art. 4 of the UN Charter: Art. 4 ° § 1 Admission to the United Nations is open to all other States which accept the obligations contained in the present Charter and , in the judgment of the Organization, are able and willing to carry out these obligations. § 2. The admission of any such state to membership of the United Nations will be effected by a decision of the General Assembly upon recommendation of the Security Council (UNRIC, 2015). In the year 1972 took place in Stockholm, Sweden, the Conference on the Human Environment and Development known as the Stockholm Conference.

It aimed to address issues related to human environment preservation the purpose was to analyze how humans lived in different parts of the planet (Web of Education, 2012). At this point we can see that nations begin to worry about the environmental degradation and the depletion of natural resources. Thus begins the conventions to discuss coexistence rules among nations, given that even a small country can end up harming everyone else. The statement of Stockholm Convention about Human Environment of the 1972 provides that: "We have reached a moment in history when we must guide our actions throughout the world with particular attention to the consequences that may have for the environment."

Through ignorance or indifference we can cause irreparable damage to Earth environment which depend on our lives and our well-being. In the other way, with a deeper knowledge and wiser action, we can achieve for ourselves and our posterity better living conditions, in a way to keep the needs and aspirations of human environment (Commission on Human Rights, 2013).

On that basis, means are articulated to understand that human beings have the duty to respect the environment in which they live. In this sense the concept of sustainability becomes increasingly spoken in every country in the world

In the year 1987 the UN presented the document Our Common Future, better known as the Brundtland Report. The concept of sustainable development emerged through this report and according to the document it can be defined as a process of transformation in which the exploitation of resources, investments direction, technological development orientation and institutional change are in harmony and reinforce the potential present and future, in order to meet human needs and aspirations (Brundtland, 1987). Sustainability is the ability to maintain a high quality of life for everyone, now and in the future, ensuring the maintenance of ecological processes and the continued availability of necessary natural resources on which life depends. Sustainability is the ability to maintain a desired condition over time. Sustainable development is a tool to achieve sustainability, not the desired goal Mitchell (2000, p.237).

In this way UNESCO organized the Rio-92, which was the United Nations Conference on Environment and Development in Brazil. The meeting was also known as the Earth Summit, attended by 100 heads of States aiming to discuss sustainable development. (Sustainable Planet, 2012). In this Conference were born three important documents - The Rio Declaration on Environment and Development and the Declaration of Principles, consisting of 27 principles aimed at the overall system integrity, environment and development.

Also was developed the Agenda 21 that according to the Brazilian Ministry of Environment (2015) can be defined as: "A planning tool for building sustainable societies, in different geographic bases, which combines methods of environmental protection, social justice and economic efficiency." On this day were also created the Millennium Development Goals that have an emphasis on eradicating poverty and hunger. The main indicators are sustainable development, reducing child mortality and illiteracy as well as reduction in greenhouse gas emissions (UN, 2001).

Another important factor was the launch of the UN Global Compact, which occurred in July 2000, an initiative developed by former Secretary General Kofi Annan, with the aim of mobilizing the international business community to adopt, in their business practices of 14 fundamental and internationally accepted values in the areas of human rights, labor relations, the environment and anti-corruption reflected in 10 principles (UN Global Compact, 2015). The Global Compact has two complementary objectives: to integrate the ten principles in business activities around the world and to catalyze actions in support of broader UN development goals, including, for example, the Millennium Development Goals (MDGs). Between 25 and 27 September 2015, more than 150 world leaders gathered at UN headquarters in New York (USA), to formally adopt a new agenda for sustainable development. This agenda is formed by seventeen Sustainable Development Goals (SDGs), which must be implemented by all countries of the world during the next fifteen years, until 2030.

In the meantime it becomes relevant for teachers to educate students not only with the aim of achieving high levels of professional performance and business as well as to implement the necessary changes to reduce the social and environmental problems (Goncalves Dias et al. 2009). (Gobal Compact, 2015). The notion of sustainability implies a necessary interrelationship of social justice, quality of life, environmental balance and breaking current development pattern. Sustainability is formed by a tripod, logically followed by three basic concepts, where each of these aspects must be closely linked and well-defined. These are the environmental, social and economic (Jacobi, 1997).

According to Sachs (1997) the concept of sustainable development refers to a new conception of limits and weaknesses recognition of the planet at the same time focuses on the socio-economic problem meeting basic population needs. Education for Sustainability purpose is to assist in the formation of committed people to social and environmental development. But not always the school reflects the conflicts of social relations which ends up being a focal point to address the problems of economic inequality, social exclusion, prejudice, discrimination, degradation and violence (Segura, 2001). Education for sustainability assumes an important element for the expansion, promotion and continuity of sustainable actions in organizations and society (Baccarin et al. 2015).

One of the references of the education process organization with sustainable concerns in global terms was the Belgrade Charter. It was developed in Yugoslavia (1975) and was aimed at educating about on effects of human activity on the environment; the letter brings eight basic guidelines on education. (Brazilian Ministry of Environment, 2015). Change the way of educating means reworking knowledge, taking into account the diversity of scenery and the possibility of conflicts that can arise. It can also mean the construction of a participatory approach in building a new society in the medium and long term.

It is noticeable the importance of including environmental education in the curricula of business schools to developing a future managers and leaders critical world view. But it is important that it be carried out an analysis of curricula in order to verify whether they are being made the necessary adjustments according to society development. Aligleri, Aligleri and Kruglianskas (2009) emphasizes the importance of training future professionals to understand what the interrelationship between environmental responsibility and good organizational performance. Padua and Tabanez (1998) environmental education provides increased knowledge, values and improvement of skills change, basic conditions to foster greater integration and harmony of the individual with the environment. In the view of Reigota (1998) environmental education indicates pedagogical proposals centered on awareness, behavior change, skills development, capacity evaluation and students participation of.

### **PRME in Fagen**

The PRME project design principles for Responsible Executive Education - PRME was first developed in 2007 by a force consisting of 60 rectors, presidents and representatives of universities from different countries. This was one of the Global Compact initiative of the United Nations to encourage higher education institutions to act responsibly and in accordance with international sustainability values (PRME Report Fagen, 2014). The aim was to develop a platform based on global engagement principle for interested academic institutions in the United Nations Global Compact. The idea materialized officially by the Global Compact Office at the Global Forum "As a world's agent the benefits of business" at Case Western Reserve University in October 2006 (PRME Report Fagen, 2014).

The Higher Institute of Administration and Economy of Mercosur - ISAE of the Getulio Vargas Foundation in Curitiba was responsible for creating the design guidelines in 2006. From this institution has been working on best practices to implement six principles involving its sphere of influence and shift work. It can be seen that the main reason for the project's appearance was the need to show it on the world education. This makes it possible to show the world what schools are understanding and studying sustainability and exchange network experiences. To achieve this goal, we seek to involve the maximum number of higher education institutions in order to promote sustainable awareness within the educational structures, thus contributing to the spread of the theme. Currently 27 educational institutions in Brazil are enrolled in PRME Project. Among them is the Federal University of Uberlândia with the Faculty of Business and Management.

Fagen, Faculty of Business and Management, was established on 02.04.1969 and makes up the college group from the Federal University of Uberlândia. It aims to develop teaching and research in management and business and training professionals focused on the development of Brazil (PRME Report Fagen, 2014). Fagen offers undergraduate courses to graduate, classroom and distance learning. The aim of the course is to guide students to develop in research, business management and generation of new knowledge (Fagen, 2015).

The current education program aims to train managers through the transmission, construction, testing and questioning of a set of knowledge that support the humanities and social skills development (Fagen, 2011). Undergraduate courses are the Management and Information Management. In the distance mode, it offers Public Administration course.

PRME Project emerged in Fagen through partnership formed by teachers Etienne Cardoso Abdala, Mara Alves Soares, Vivian Duarte Couto Fernandes and Luciana Oranges Cezarino, who was a substitute teacher at the Faculty of Economics, Management and the University Accounting of Ribeirão Preto São Paulo (FEARP/USP) and has developed research related to the PRME Project there. To join the others who have formed a study group on environmental management they initiated PRME Project in Fagen (PRME Report Fagen, 2014).

Fagen is accredited to the project in September 2014 and in Portuguese diagnostic report was submitted in December 2014. From this it was possible to identify what the current situation of Fagen regarding disciplines and research related to sustainability was, but also which were the improvement points to develop (Fagen, 2015).

### **METHODOLOGY**

A descriptive research with a quantitative and qualitative approach with teachers was conducted on October 2015. According to Gil (2008) descriptive studies are aimed at the description of population characteristics, a phenomenon or an experience. In the words of Andrade (2003) is a standard research technique of data collection and is mainly carried out through questionnaires and systematic observation. Questionnaire can be defined as a set of questions about a particular topic that does not test the ability of the respondent, but measures their opinion, their interests, personality aspects and biographical information (Yaremko, et al. 1986, p.186).

Altogether the questionnaire is divided into five blocks. The profile teacher identification, three blocks respectively related to research, teaching and services in Fagen and a last block about the teachers relationship with PRME project. 34 valid responses from Fagen teachers were obtained, the channels

were used to answer email and attendance application, five responded in person and others by Google Forms platform.

Additionally a focus group was conducted with a teacher moderator and other eight members. Seven of them were teachers from Fagen and just one was Master student. The focus group was developed at English classes that some teachers manage to improve their language skills. The participation was facultative and happened on November of 2015.

## RESULTS

### Focus Group Results

The results of focus group show that, in general, teachers have a positive perception about sustainability: "I believe it's a very cool thing, but I think it is a bit far from reality. I think it's not as practiced, more theoretical. For example, here at the university, we have a few actions as the points for garbage collection, but is limited to this. I believe that should be done more". It can be addressed too the clear need to enhance environmental issues regarding Fagen thought teachers' perception.

Another raised point was the relation with Brazilian culture: "I think is part of our culture, the culture of the Brazilian people. People do not have the habit of worrying and act for the future. The subject is treated only as a supplementary subject, especially in technical areas". When questioned about the business schools role on sustainability education they agree to the high relevance. "Yes, because it's very important to have this concern about the future, thinking ahead, and I think that business people do not know much about sustainability. It is critical that undergraduate students are involved in it".

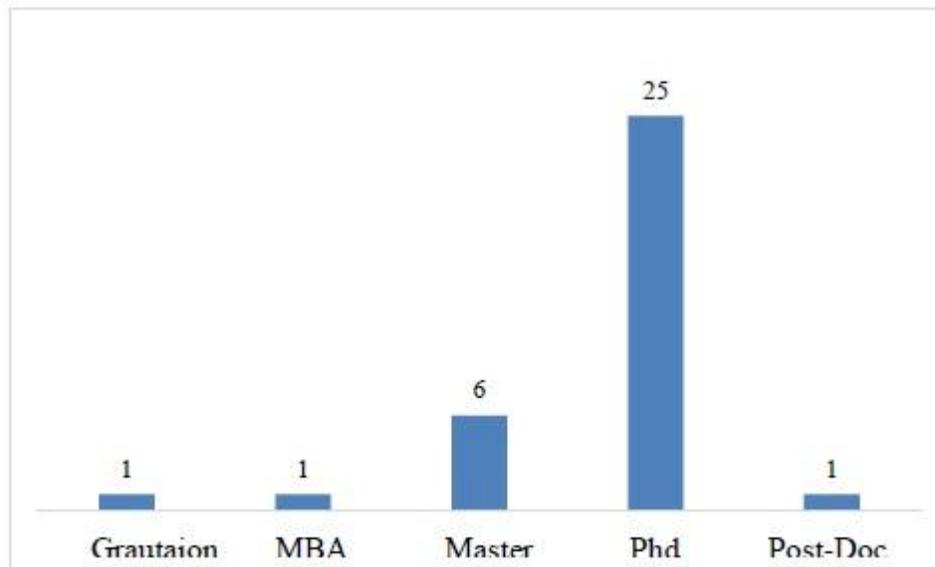
The answers were also positive when questioning if management education towards sustainability could change students culture or way of thinking: "Yes I think business schools have the power to turn these mental models. These managers' mental models who are concerned primarily with making money without considering the future... This need to be transferred to society and one of the means is through the students. From my point of view the system education has not, a practical side... It's more focused on research. And yet there is not enough research on sustainable practices, green practices"... "This is not incorporated into the students' curriculum".

With the question: What can we do to promote education towards sustainability in Fagen? "I think you can talk and teach about it, to make students minds open to this subject. But I think the path is not forced to include sustainability in curriculums ... it's better to create a parallel project diversity, programs, actions that can complement lessons during periods." And other teacher complements..."I also think it's necessary to make a cross- teaching. Talk about green operations in research, marketing, in finance in a multidisciplinary way ... The point is to find a way to make money, make a profit without necessarily destroying the environment. The idea is not to compete with nature, is to cooperate with it."..."We must discuss about sustainability in class. Just talking does not help, and discussions of the subject are very rare."

### Questionnaire Results

Based on the collected data, there were 34 respondents (teachers) 19 are female and 15 male. About the age, two teachers are between the age group 20-29 years, ten in the range 30-39 years and most are in the range of 40 to 59 years represented by 22 teachers. With this result we can see that the Fagen teaching staff is comprised of experienced professionals. The starting year at Fagen was questioned: 12 teachers have over five years of experience in college and that 22 have experience less than this period. Importantly, the highest start year concentration was in 2013, a fact that reflects the link between structured public policies between 2003-2012 to ensure quality in federal higher education in Brazil.

Analyzing the degree of teachers' titulation, it can be seen that most have masters or Phd, characterizing a well-prepared team.



*Graph 1 - Degree Titulation of Fagen teachers*  
*Source: Research Instrument*

Regarding the participation of teachers in a sustainability project within Fagen, they were asked if have participated or currently participate, 22 responded that they have never been involved in a project and only 12 have participated in a project within the Fagen or supported the idea.

When analyzing teachers's opinion about the manager contact to sustainability issues while their graduation, almost all of them point that they reinforce its role, 33 of the 34 classified as very important, and only one classified as irrelevant. This result agrees with Aligleri, Aligleri and Kruglianskas (2009) as they indentify the important of future professionals understand the interrelationship between environmental responsibility and good organizational performance.

By analyzing the behavior towards future plans, the result shows that 21 have plans to participate in a sustainability project. In this same item some teachers cited some plans that have to work with sustainability projects. For example, to create projects that work on the inclusion of sustainability in supply chains, working with sustainability indices listed on BOVESPA, to encourage electronics recycling, to encourage renewable energy use and to extension work on local university community. And 22 teachers address that sustainability issue is present on subjects they teach. This demonstrates that the issue is already becoming present, at least informally.

About the importance of a partnership between staff, teachers and students for the sustainable practices implementation in Fagen, 32 agree partly or completely that for sustainable practices implementation in Fagen is required this partnership. By analyzing on the willingness of teachers to engage in a project, 27 teachers were willing to, while two showed no interest in participating in a project focused on sustainability.

When it comes to identify the barriers that hinder the implementation of sustainable issues in it has a greater weight in the institution's budget structure dedicated for this purpose, and the lack of initiatives Dean and Pro-Rectories. Teachers (18) also indentify lack of students' initiative, 24 indicated that lack initiatives of the Company's servers. Fagen's teachers made some proposals for sustainability projects that could be implemented in the institution in question 16 of the questionnaire.

Some proposals were to fortification PRME project, to expan sustainability education in various disciplines, to encourage engagement with DIRSU (Susrainability Directory) and to develop research and extension projects involving students, teachers and technicians. Other points mentioned were

the separation of waste and selective collection, the use of printed sheets and useless as scratch paper, turning off lights, fans, projectors before leaving classroom.

Closing the analysis, it was asked to teachers' knowledge about the PRME Project, 26 respondents who do not know the project. This demonstrates a need for further intensification of the project dissemination within Fagen, since the institution is already a member of the PRME Project. This requires the commitment of all teachers in order to ensure the development of the project that has the intention to develop education for future managers based on the Principles of Responsible Executive Education.

#### FINAL THOUGHTS

Education in sustainability becomes increasingly becoming a highly important topic today. This research was intended to identify the faculty vision with respect to sustainability and PRME Project in Fagen - Faculty of Business and Management, our objective has been achieved. From the considerations presented in the research it can see that most teachers never attended a sustainability project in Fagen, but most understand that the manager should have contact with the subject in their training and are willing to engage in a project. Some teachers had plans to work with sustainability in the future, and said address the issue in their disciplines, a fact that shows the concern on the part of some managers with the sustainability issue in Fagen.

Regarding the knowledge of the PRME Project most claimed to know, so you can conclude that the project is still little known in the Faculty of Business and Management. Therefore it is necessary to invest in publicizing the project to increase more and more the membership of teachers and consequently the transfer for students.

#### BIBLIOGRAPHY

- Aligleri, L.; Aligleri, L. A.; Kruglianskas, I. 2009. *Gestão Socioambiental: Responsabilidade e sustentabilidade do negócio*. 1<sup>o</sup>.ed. São Paulo. Atlas.
- Andrade, M. M. 2003. *Introdução à metodologia do trabalho científico*. 6. ed. São Paulo: Atlas.
- Baccarin, G.; Cezarino, L.O.; Fernandes, V.; Liboni, L.; Martinelli, D.P. 2015. Aplicação do Soft System Methodology na Gestão de Resíduos Perigosos em Laboratórios. *Anais do XI Congresso Brasileiro de Sistemas*, Franca.
- Braga, A. S. 2013. Organizações internacionais e o surgimento da ONU. In: *Âmbito Jurídico*, Rio Grande, XVI, n.111, v (4).
- Comissão de Direitos Humanos. Universidade de São Paulo. Disponível em: <<http://www.direitoshumanos.usp.br/index.php/Meio-Ambiente/declaracao-de-estocolmo-sobre-o-ambiente-humano.html>> (accessed May 19, 2015).
- Extra Globo. Disponível em: <<http://extra.globo.com/noticias/educacao/profissoes-do-futuro/meio-ambiente-sustentabilidade-em-alta-no-mercado-de-trabalho-15428836.html#ixzz3ebPCUFFQ>> (accessed June 30, 2015).
- Faculdade de Gestão e Negócios. 2014. *PRME Report*. Uberlândia. 51 p. Relatório. Fischer, A.; Pires, F. 2014. E agora, RH? *Ideia Sustentável Review*. v. 35(9), p. 50-51. Gil, A.C. 2008. *Como elaborar projetos de pesquisa*. 5<sup>o</sup> ed. São Paulo: Atlas.
- Jacobi, P. et al. (orgs.). 1998. *Educação, meio ambiente e cidadania*. São Paulo: SMA.
- Brazilian Ministry of Environment. <<http://www.mma.gov.br/quem-%C3%A9-quem/item/8066-carta-de-belgrado>> (accessed December 01, 2015).
- Mitchell, C. 2000. Integrating Sustainability in Chemical Engineering Practice and education: Concentricity and its Consequences. *Trans IChemE*, v.78, part B, p.237-242.
- United Nations.. Disponível em: <<http://nacoesunidas.org/conheca-os-novos-17-objetivos-de-desenvolvimento-sustentavel-da-onu/>> (accessed November 22, 2015).
- Pádua, S.; Tabanez, M. (orgs.). 1998. *Educação ambiental: caminhos trilhados no Brasil*. São Paulo: Ipê, 1998.
- PRME <http://www.unprme.org/working-groups/working-groups.php>. (accessed May 5, 2015).
- Reigota, M. 1998. Desafios à educação ambiental escolar. In: Jacobi, P. et al. (orgs.). *Educação, meio ambiente e cidadania: reflexões e experiências*. São Paulo: SMA, p.43-50.

- Richardson, R. J. 1999. *Pesquisa Social: métodos e técnicas*. 3° ed. São Paulo, Atlas.
- SEGURA, Denise de Souza Baena. Educação ambiental na escola pública: da curiosidade ingênua à consciência crítica. São Paulo: Annablume: FAPESP, 2001
- UNESCO. 1998. *La Educación Superior y el Desarrollo Humano Sostenible*. Paris: UNESCO.
- Universidade Federal de Uberlândia. Faculdade de Gestão e Negócios.  
Available at: <<http://www.fagen.ufu.br/ADM>> (accessed November 22, 2015).
- Yaremko, R. K.; Harari, H.; Harrison, R. C.; Lynn, E. 1986. *Handbook of research and quantitative methods in psychology*. Hillsdale, NJ: Lawrence Erlbaum.