Study on Social Responsibility Learning Needs to Capacitate the Responsible Education in Business Engineering

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ABSTRACT

The advent of digital era and the growing competition require higher education providers to equip graduates with the right mix of skills needed for competing in a technology rich environment, delivering value-added to the market and to the economy at large. The responsible education has a pivotal role in addressing current business issues related to professional business conduct, citizenship and equity values, social and civic skills, and sustainable development concerns.

The paper aims to investigate the implications of social responsibility concept in the education area and to examine the learning needs of business engineering students with respect to business, environment, and social concerns deeply embedded in the social responsibility framework.

The results enable ranking the attitudes and perceptions, knowledge and skills of business engineering students and bring to light their straightforward expectations with respect to better promoting social responsibility strategies and practices, and the need to bring the world of work with toughest social and innovation issues in the world of education.

Considering the research findings, the author paid attention to the responsibility of education to fulfill its role in society by adjusting the business engineering education towards sustainable development and by augmenting education through social responsibility teaching and learning components into the improved curriculum.

Keywords: social responsibility, sustainable education, quality and innovation in higher education.

INTRODUCTION

The rapidly changing market trends with globalization, growing economic and financial interdependence, more geographical dispersed value chains, and social media issues created the context for social responsibility expectations of societies around the globe.

In an increasingly interconnected world, the ISO 26000:2010 (2010) stated the aim of social responsibility as contributing to sustainable development of the society by integrating responsible behavior into existing organizational systems, policies, practices and processes based on an integrated view of economic, social and environmental considerations. It proposed six key subjects holistically integrated through the core subject entitled organizational governance which enables effective incorporation of accountability principles, transparency, ethical behavior, respect for stakeholder interests and respect for the rule of law, into decision making and implementation processes.

The key subjects embedded in organizational governance are referring to: a) human rights - civil, political, economic, cultural and social rights; b) labour practices – recruiting and employment
policies and procedures, condition of work and social protection of employees, promoting social
dialog inside and outside the organisation, health and safety at work, human development and
training in the workplace; c) environment – environmental risk assessment and precautionary
approach as life cycle thinking; d) fair practices – anti-corruption, responsible political involvement,
fair competition, property rights; e) consumer issues – fair marketing, information and contractual
practices, sustainable consumption, education and awareness; f) community involvement and
development – education and culture, employment creation and skills development, technology
development, wealth and health, social investment.

Considering these strategic issues, the European Commission proposed the EU strategy for social
responsibility which acknowledge its multidimensional nature and introduced a broader definition
by defining the concept as being the responsibility of enterprises for their impacts on society.
Hence, a high level of stakeholders’ trust is based on sustainable businesses meaning to maximize
the creation of shared value for owners and/or shareholders and for society at large and to identify,
prevent and mitigate possible adverse impacts (European Commission, 2011).

The knowledge economy has deeply implications for the role of education as a key driver of
economic growth and for increased capacity to compete in the global economy and to respond to
existing and emerging challenges. In this context, the 2014-2021 UNESCO education strategy
underlined the pivotal role of a responsible education in developing the knowledge, skills, values
and attitudes learners and students need to secure more peaceful, justice, tolerant and inclusive
societies. Thereby, entrepreneurial skills and the ability to absorb, adapt and apply knowledge and
technology are of paramount importance for progress in the quality of education and for
contributing to inclusive and sustainable development (UNESCO, 2014; UNESCO, 2017).

Interesting to underline, the UNESCO education strategy promoted a holistic vision of education as
a fundamental human right essential for personal and socio-economic development. It embraced,
under the mission of education for peace and sustainable development, a broad life learning
perspective of education toward empowering people to fulfill the personal expectations for a decent,
healthy life and work, contributing to the achievement of the socio-economic development
objectives. In addition to acquiring knowledge, attitudes, and skills, the content of learning should
enable problem-solving and creative thinking, understanding and respect for human rights,
inclusions and equity, and cultural diversity as reliable meaning for peace, responsible citizenship
and sustainable development.

Considering the implications of education in the well-being of individuals and in the progress of
society, the paper aimed to investigate the growing needs of educating business engineers to become
responsible citizens with increased sense of initiative, being better prepared to adopt responsible
business conduct and to resolve critical sustainably issues.

The study commences with a brief literature research in the area of social responsibility
development concepts aiming at capturing the multidimensional role of education in proactively
educate future engineers and entrepreneurs to be socially responsible. The study is complemented
by a primary research questionnaire-based in order to examine attitudes and perceptions, knowledge
and skills of business engineering students with respect to social responsibility concerns.

RESEARCH PROBLEM

During the last decades, the issue of sustainability has gained increasing importance in enterprises
and society, requiring new attitudes and responsible behaviors supporting business development by
considering economic, environmental and social aspects.
In this regard, the scholars highlighted the necessity of social obligation, social reaction, and social responsiveness for business practices leading to the ongoing viability and sustainability of enterprises, regardless of operating industry. The social responsibility is seen as closely related to entrepreneurship since this covers the entrepreneur’s relation to working circumstance whereas social responsibility encompasses the effects of business on society, and both concepts call for properly designed processes: planning, organizing, managing, controlling and improving (Duening, Hisrich & Lechter, 2010).

The researches in the field acknowledged the entrepreneurship as being closely related to the social responsibility objectives of enterprises which means to achieve sustainability for society as a whole based on tackling economic, environmental, and social aspects in an integrated manner (Fleaca et al., 2014). This means to design an effective decision making and implementation system for organizational governance to turn ideas into actions and to create innovative businesses.

Other scholars introduced the concept of social entrepreneurs in the context of entrepreneurship, highlighting the benefits of creating social values rather than financial ones based on recognizing new innovative opportunities for positive changes in the society. Despite the certain benefits for society at large, there is a lack of understanding about social entrepreneurship which is barely supported and developed by the state and local government, complemented by a severe shortage of adequate education and practices for social entrepreneurship education (Bikse et al., 2015).

Looking at the education mission and its role in the society, the renew EU strategy 2011-2014 for social responsibility clearly stated that responsible business conduct in operating business is the key means towards achieving the Europe 2020 strategy, including the 75% employment target (European Commission, 2011; European Commission, 2010). The multidimensional nature of social responsibility education requires the engagement of all stakeholders, being embedded in the global framework through a set of internationally recognized principles and guidelines which support integrating sustainable development and responsible citizenship into relevant education curricula.

According to the Staff Working Document of EC "Rethinking education: Investing in skills for better socio-economics outcomes", the education dimension of Europe 2020 is enhanced by the entrepreneurial and civic skills of students which boost productivity, competitiveness, and innovations. Through creativity, innovation and risk taking, ability to plan and manage projects in order to achieve objectives, coupled with particularly knowledge of social and political concepts and structures (democracy, equity, citizenship and civil rights), the employability of young people is enhanced conceiving to new business creation for individual, economic and social benefits (European Commission, 2012).

The Flash Eurobarometer 363 study pointed that 79% of European citizens are interested in what companies do to behave in a responsible way towards society and almost one half (47%) marked they do not feel informed about the social responsibility actions of companies although they are interested in this information. As for Romania, 76% of citizens are interested in what companies do to behave responsible for society, and only 33% of them are informed about such behaviours, and one half of respondents (51%) think that companies pay less attention to their influence on society compared to ten years ago (European Commission-DG for Enterprise and Industry, 2013).

The aforementioned studies, researches and documents demonstrate the major concerns of international research community and decisional factors for raising the importance of the social responsibility practices in business environment, as key means towards the smart growth of society. The business engineering education as the engine of future innovation and value creation gains more responsibility since it has to go beyond technical knowledge and prepare students with attitudes and skills needed to create business models, in line with productivity and resources
efficiency requirements, that contribute to societal wellbeing and led to jobs that are more productive.

Thereby, the learning needs of students from this field of education are of utmost importance for preparing future responsible engineers and entrepreneurs being the first step in designing those learning outcomes which may equip learners with critical and objective thinking, and analytical skills for resolving interdisciplinary and complex business, social and environmental issues.

The study undertaken was designed to fulfill two research objectives as follows: a) to identify and assess the students’ attitudes and perceptions regarding the social responsibility (SR) related to business, environmental, and social components; and b) to quantify the students’ learning expectations related to social responsibility knowledge and skills. The methodology was comprised on developing the map of research process based on defining the chain of research variables with appropriate operational definitions, measurement scales and related scaling technique, as designated in table 1. To enable capturing the relevant aspects from business, environmental, and social components of social responsibility it was used the Likert scale containing suitable research statements for each operational research variables.

Table 1: The map of research process

| Research objectives | Research variables | Operational variables | Measurement scales | Scaling technique |
|---------------------|--------------------|-----------------------|--------------------|-------------------|
| O1. To identify and assess students’ attitudes and perceptions about SR | Attitudes | Business, environmental, social dimensions | Interval scale | Likert scale based on non-comparative technique |
| | Perceptions | Business dimension | | |
| O2. To quantify the students’ learning expectations on SR | Knowledge | Ethical decisions, SR principles, conflict resolution strategies, specialized legislation | Interval scale | |
| | Skills | Elective courses in SR, compulsory courses in SR, study cases in SR, workshops in SR | | |
| | gender | Masculine, feminine | | Distribution of frequency |
| Demographic characteristics of students’ sample | | | Nominal scale |
| | Field of study | Business engineering and management, Economic Engineering in other sectors, Economic Engineering in Chemical and Materials Industry | | |
| | Academic level | Bachelor and master levels | |

The business dimension was tackled by considering several items concerned to the involvement of companies in economic causes: useful and high quality goods and services; making profit for shareholders; establishing the code of conduct in doing business; respect the rule of law. Also, it was considered several statements quantifying the effect of responsible behavior on company image and reputation. The social dimension was assessed by defining the factors which should be taken
into consideration when doing businesses such as the community in which companies operate; the health and safety issues of employees; the encouragement of individual creativity and innovation; donation to universities and schools; organizing internships for students; ensuring equal opportunities for employees; concern for quality of life and well-being of the community; supporting personal development. The environmental dimension was analyzed through the concern for reducing energy consumption and climate changes.

RESULTS AND FINDINGS

The study was based on a questionnaire designed to capture relevant information with respect to social responsibility and responsible educational management. The data was collected through an online survey distributed to students enrolled in the business engineering area within the higher education institution envisaged for this study and 80 students have filled in the questionnaires.

The structure of the sample related to gender was somewhat unbalanced with females 62.5% and males 37.5%, and the bachelor level was mostly represented with 64.5% of respondents followed by master level with 32.5% of the sample. As for the field of study, 60% of students were enrolled in business engineering and management, 22.5% of them came from economic engineering in the electrical, energy, and electronics sector, and only 17.5% of the sample was represented by economic engineering in chemical and materials industry.

To fulfill the first research objective, the students were asked to analyze and mark their level of agreement related to the statements used for each of the operational variables: economic, environmental, and social.

As table 2 designates, the weighted scores for assessing the business engineering students' attitudes regarding the social responsibility behavior of companies placed firstly the concern for health and safety (4.73), followed by the production of useful and high-quality goods and services (4.69), and equal opportunities and the encouragement of personal development (4.54). Worryingly, the respondents are less likely to think about the respect for the rule of law (4.23), the concern for energy reduction (4.19) and the philanthropy (4.09).

Looking at the students’ perceptions about social responsibility (table 3), the respondents were the most likely to appreciate the improved reputation for companies earned as effect of displaying socially responsible behavior (4.45) and the long run profit increasing as result of the improvement of the quality of life (4.25). Also, the respondents do not perceive that social responsibility may increase the vulnerability of the company through a high resources consumption, removing it from its primary business purpose (3.19).

As regard to the learning needs of students from this field of education, the second research objective, table 4 presents the frequency distribution of responses with respect to the knowledge needed to be developed and acquired in the social responsibility concerns during the academic period. Almost a half of students (55%) marked as very important the theme of ethical decision making process, and the guiding principles of corporate social responsibility (42.5%). However, 68.75% of students are most likely to appreciate the knowledge related to managing conflicts strategies.

Finnaly, the students are expecting to develop their skills in social responsibility concerns through workshops with business practitioners and experts (4.43), internships with subjects in social responsibility issues (4.06), and practical study cases in the field (4.06), as table 5 reveals.
Table 2: The students' attitudes on Social Responsibility (SR) – weighted scores

| Research statements                                      | 1 points | 2 points | 3 points | 4 points | 5 points | Weighted scores |
|----------------------------------------------------------|----------|----------|----------|----------|----------|-----------------|
| Employees health and safety                              | 0        | 0        | 4        | 14       | 62       | 4.73            |
| Producing useful and high-quality goods and services     | 0        | 0        | 3        | 19       | 58       | 4.69            |
| Equal opportunities for employees                        | 0        | 0        | 5        | 27       | 48       | 4.54            |
| Support personal development and wellbeing of the employees | 0        | 0        | 4        | 29       | 47       | 4.54            |
| Support innovation and individual creativity             | 0        | 0        | 4        | 31       | 45       | 4.51            |
| Making profit for shareholders                           | 0        | 0        | 7        | 30       | 43       | 4.45            |
| Organizing internships for students                      | 0        | 0        | 7        | 37       | 36       | 4.36            |
| Environmental concern and climate changes                | 0        | 0        | 12       | 29       | 39       | 4.34            |
| Improving the quality of life for the community in which they operate | 0        | 0        | 8        | 37       | 35       | 4.34            |
| Establish the code of conduct in doing business          | 0        | 0        | 9        | 41       | 30       | 4.26            |
| Respect the "rule of law"                               | 0        | 0        | 14       | 34       | 32       | 4.23            |
| Reduction of energy consumption                          | 0        | 2        | 14       | 31       | 33       | 4.19            |
| Philanthropy to universities etc.                        | 0        | 2        | 14       | 43       | 21       | 4.04            |

Table 3: The students’ perceptions about Social Responsibility (SR) – weighted scores

| Research statements                                                                 | 1 points | 2 points | 3 points | 4 points | 5 points | Weighted scores |
|-------------------------------------------------------------------------------------|----------|----------|----------|----------|----------|-----------------|
| A company willing to build strong reputation has to display a SR behaviour          | 0        | 0        | 6        | 32       | 42       | 4.45            |
| Supporting the improvement of the quality of life increases company profit on the long run | 0        | 2        | 10       | 34       | 34       | 4.25            |
| A company adopting SR practices could obtain competitive advantages over a company that does not | 0        | 0        | 15       | 45       | 20       | 4.06            |
| SR behaviour could be in the economic benefit of shareholders                       | 0        | 1        | 17       | 45       | 17       | 3.98            |
| Companies have already too much social power and should not engage in other SR activities | 31       | 19       | 12       | 11       | 7        | 3.70            |
| SR is only a matter of public relation reasons                                       | 18       | 23       | 19       | 15       | 5        | 3.43            |
| SR behaviour may increase the vulnerability of the company                           | 11       | 25       | 21       | 14       | 9        | 3.19            |
Table 4: The students’ learning needs on Social Responsibility (SR) knowledge

| Research statements                                      | Necessary | Somewhat extent | Not necessary | Total (%) |
|----------------------------------------------------------|-----------|-----------------|---------------|-----------|
| Ethical decision making                                  | 55.00     | 43.75           | 1.25          | 100       |
| The principles of CSR                                    | 42.50     | 51.25           | 6.25          | 100       |
| Strategies for conflicts resolution/managing conflicts   | 68.75     | 27.50           | 3.75          | 100       |
| Knowledge of legislation in the field of specialization   | 67.50     | 32.50           | 0.00          | 100       |
| Knowledge of ethical and moral aspects of management     | 63.75     | 36.25           | 0.00          | 100       |

Table 5: The students’ needs on Social Responsibility (SR) skills

| Research statements                          | 1 points | 2 points | 3 points | 4 points | 5 points | Weighted scores |
|---------------------------------------------|----------|----------|----------|----------|----------|-----------------|
| Workshops on themes in SR                   | 0        | 0        | 6        | 34       | 40       | 4.43            |
| Internships with subjects in SR             | 1        | 0        | 17       | 37       | 25       | 4.06            |
| Practical study cases in SR                 | 0        | 3        | 14       | 38       | 25       | 4.06            |
| Compulsory courses in SR topics             | 3        | 6        | 21       | 38       | 25       | 3.82            |
| Elective courses in SR topics               | 2        | 1        | 23       | 43       | 11       | 3.75            |

CONCLUSIONS

The results of the study brought to light the straightforward learning needs of students enrolled in different business engineering and management areas with respect to business, environment, and social concerns. The shortage of interests in sustainable development of human society and the lack of robust educational offers in social responsibility behavior in the business and labor market urge for innovative solution with embedded educational components nourished with subjects in accountability principles, ethical behavior and decision making, transparency, respect for stakeholders interests and for the rule of law.

The future lines of the research are focused on questioning the employers about their views on responsible education in business engineering to match the social responsibility needs of both students and business community. By this way, the education providers fulfill their role in society struggling to change the status quo to improve the quality of education and the relevance of students’ knowledge and skills to the current market requirements.

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