INSTITUTE OF INDUSTRIAL ENGINEERING AND MANAGEMENT
AT STU MTF TRNAVA – PREDICTOR OF SUSTAINABLE
CORPORATE SOCIAL RESPONSIBILITY IN UNIVERSITY
EDUCATION AND INDUSTRIAL PRACTICE IN SLOVAKIA

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Abstract

The main ambition of the paper is to familiarise the public with the objectives of the KEGA project No. 037STU-4/2012 Implementation of the “Sustainable Corporate Social Responsibility” subject into the study programme of Industrial Management in the second degree of study at STU MTF Trnava, and to introduce the Faculty of Materials Science in Trnava, Institute of Industrial Engineering and Management as a predictor of the sustainable corporate social responsibility concept in university education and its application in industrial companies in Slovakia.

Key words

sustainable development, sustainable corporate social responsibility, questionnaire survey

Introduction

Concept of corporate social responsibility is presented as a potential and opportunity for sustainable change from the strategies of unlimited growth towards the strategy for sustainability in the current situation of the financial, economic and also moral crises in the world.

We are living in sustainable revolution which, according to Jean and Edward Stead (2012), like any social revolution, goes through three phases typical for all social revolutions: genesis, critical mass and spread. Genesis took place in the 70s and 80s. Currently, the revolution is in the process of creating the necessary critical mass and its world-wide distribution. Furthermore, based on the analysis of publications and studies relevant to this issue, the authors state that the movement produces plenty of ideas, but the lack of solutions, because it lacks the financial support required for the development and implementation of solutions.
According to Tilbury and Wortman (2011), the following skills are essential in education of sustainable development:

- **Envisioning** – being able to imagine a better future. The premise is that if we know where we want to go, we will be better able to work out how to get there.
- **Critical thinking and reflection** – learning to question our current belief systems and to recognize the assumptions underlying our knowledge, perspective and opinions. Critical thinking skills help people learn to examine economic, environmental, social and cultural structures in the context of sustainable development.
- **Systemic thinking** – acknowledging complexities and looking for links and synergies when trying to find solutions to problems.
- **Building partnerships** – promoting dialogue and negotiation, learning to work together.
- **Participation in decision-making** – empowering people.

Corporate social responsibility is becoming an effective tool for competitiveness and sustainable growth. Sustainable socially responsible entrepreneurship provides a systematic concept that helps integrate the environmental, social, economic and ethical criteria into business strategies and decisions (Sakál, 2013). It is necessary to change the paradigm of creation and distribution of wealth on the planet Earth. This change means a "new business model" based on the strategy of "win - win" as reported by the authors Michael Porter and Mark Kramer (2011).

Regarding the recommendations contained in "Slovakia's success in creating opportunities for socially responsible business" (2011) and the document of the European Economic and Social Committee in the area of corporate social responsibility of January 2013: "Report on corporate social responsibility: a responsible and transparent corporate behaviour and sustainable growth" (2013), we conducted a questionnaire survey to verify the quality of teaching issues of sustainable corporate social responsibility within the scope of strategic management at the STU Faculty of Materials Science and Technology Trnava. The results are described in this contribution.

We agree with the National Quality Programme of the Slovak Republic for the years 2013-2016 that the achievement of corporate social responsibility requires interaction of economy, environment and ethics and involvement of all stakeholders. **We want to contribute to the objectives in the area of CSR by implementing the subject "Sustainable Corporate Social Responsibility" into the curriculum of the second degree study in the Industrial Management study programme at the STU MTF Trnava.**

**Characteristics of KEGA project No. 037STU-4/2012**

Sustainable corporate social responsibility provides a systematic concept that helps integrate the social, environmental, economic and ethical criteria into the corporate strategies and decisions.

The aim of the KEGA project is the implementation of the subject of “Sustainable Corporate Social Responsibility” into the study programme of Industrial Management in the second degree of study at the STU MTF Trnava (http://www.portalvs.sk/sk/prehlad-projektov/6838).

**Partial objectives** of the project were defined as follows:

1. **Carrying out an analysis of available information sources on the issue of the education for sustainable development and corporate social responsibility.**
2. **Designing a curriculum of the “Sustainable Corporate Social Responsibility” subject.**
3. Writing a textbook for teaching the subject of “Sustainable Corporate Social Responsibility”.
4. Experimentally verifying the quality of teaching the subject of “Sustainable Corporate Social Responsibility”.
5. Optimising the curriculum of the subject of “Sustainable Corporate Social Responsibility” and the related textbook.

We focused on the current state of their perception of the corporate social responsibility (CSR) and sustainable development (SD) concepts in the Slovak industrial companies, as well as an interest in SD, CSR in the research and teaching at universities and colleges in Slovakia in three conducted surveys. The results were published in “Výkonnosť podniku“ (Company Performance) http://www.vusem.sk/, “Transfer inovácií” (Transfer of Innovation) (http://www.sjf.tuke.sk/transferinovacii/) and “Problemy razvítiia territorii” (Problems of Development of Territories) (http://pdt.vssc.ac.ru/) journals and at the ISEI UNC RAN Conference (http://www.isei-ufa.ru/, http://www.isei-ufa.ru/?part_id=44&news_id=171).

Aim of the first questionnaire survey was to obtain and verify the existing knowledge about the core areas of SD and CSR: sustainable corporate social responsibility, risk management, stakeholders, multicriterial optimization, sustainable marketing, strategy for sustainable development and sustainable competitiveness based on the concept of shared values and externalization of costs in business practice. The questionnaire is available online on:

- https://docs.google.com/spreadsheet/viewform?formkey=dGpGQ1EtQk1ld1ltM2xfa0VucTVPRkE6MQ.

The second questionnaire survey was focused on the perception of the CSR and SD concepts and practices in research and teaching in the higher education institutions and universities in Slovakia. The questionnaire was compiled through the GoogleDocs application and is available online on:

- https://docs.google.com/spreadsheet/viewform?formkey=dC0yUER3cHpXbmQ5bG8vUndKYVVyaHc6MQ.

The third questionnaire survey was conducted among the students of STU MTF in Trnava. Its aim was to determine the current state of the perception of sustainable development and social responsibility concept and practices among the students at the Faculty of Materials Science and Technology in Trnava. The survey was compiled through the GoogleDocs applications and is available online on:

- https://docs.google.com/forms/d/1CVLLsijd7m5Mk-Z9M4-5ngq0EbPZFziUd4aJUpvh3_Y/viewform.

An important finding of the survey was that 70% of students declared their interest in the prepared subject of Sustainable Corporate Social Responsibility at the Faculty of Materials Science and Technology in Trnava, and about a half of the students stated, that the issue of CSR and SD should be introduced in other subjects within their studies. On the basis of the above-mentioned empirical study, our results published in a monograph containing four parts and in scientific journals and presented at the domestic and international scientific conferences, we established the objective necessity of introducing the Sustainable Corporate Social Responsibility subject to all levels of education, especially in terms of university education.
Characteristics of the conducted questionnaire survey within the subject of Strategic Management among the students of STU MTF Trnava

Based on the results of the above-mentioned surveys about CSR and SD in industry practice and education system in Slovakia, we conducted another questionnaire survey. The main aim of this questionnaire survey was to experimentally verify the teaching quality and interest of the STU MTF students in sustainable corporate social responsibility.

Issues of SD and CSR were taught within the subject of Strategic Management in the winter term of the academic year 2013/2014. The total number of addressed students was 116 and all of them filled in the questionnaire survey online, that represents 100% of respondents. The survey was conducted from 19th December to 22th January 2014. We compiled the questionnaire through the GoogleDocs application. It is available online on:

- [https://docs.google.com/forms/d/1SnSWvG0LPdJ9ASUaPxFfZk1ldnQTUnqWs_P8shxaQg4/viewform](https://docs.google.com/forms/d/1SnSWvG0LPdJ9ASUaPxFfZk1ldnQTUnqWs_P8shxaQg4/viewform).

The information gathered from 116 students is described in the following sections of this paper. The structure of questionnaire respondents is as follows:

- 72 students of full-time study,
- 43 students of part-time study.

Results of the conducted questionnaire survey among the students within the subject of Strategic Management at STU MTF Trnava

Almost all respondents were familiar with the terminology of CSR and SD; 93% of students knew the meaning of the term “sustainable development” (Figure 1), and 99% of students were familiar with the term “sustainable corporate social responsibility” (Figure 2).

![Fig. 1 Knowledge of the term “sustainable development”](image)

Source: drawn by authors
Interest in becoming more familiar with the issues of SD and CSR based on the past experience from the subject of Strategic Management was declared by more than 4/5 (i.e. 83%) of students. Nearly 78% of students encountered the issue of SD and CSR at other subjects. Students indicated mainly the subjects such as TQM, Fundamentals of Environmental Science and others.

Based on the experience within the subject of Strategic Management, the vast majority of students (90%) considered the area of SD and CSR significant for their study, while 69% of students declared implementation of the SCSR subject into the study programme as beneficial (Figure 3).

**Fig. 2 Knowledge of the term “sustainable corporate social responsibility”**

*Source: drawn by authors*

**Fig. 3 Significance and usefulness of the SCSR subject**

*Source: drawn by authors*
Students are mainly interested in the areas of sustainable strategic management: CSR with focus on the social, environmental and economic areas, sustainable development, environmental and social impacts, environmental and economic terms, change of thinking paradigm, distribution of wealth and sustainable production.

Nearly 2/3 of students think that the issue of SD and CSR should be taught within other subjects of their studies and propose the introduction of this particular topic into the courses of TQM, Financial Management, Production Management, Management of Enterprise, Personnel Management and Strategic Management.

In the survey, 70% of respondents stated that the SD and CSR topics should be dealt with in Bachelor theses, Master theses and papers for the Student Research Conference; 92% of students think that the gained knowledge can be used in further studies, eventually in business practice. Most of the students (87%) believe that the SCSR concept is a possible solution to the current global challenges. As the results show, 68% of the students think that the current business model based on tough competitiveness is not acceptable in the 21st century. Only 36% of them are familiar with a new business model based on the "win-win" strategy which solves the problem of creation and distribution of wealth on the planet Earth (Figure 4).

![Fig. 4 Partial results of the survey](source: drawn by authors)

**Acknowledgement**

The paper is also a part of the submitted KEGA project No. 037STU-4/2012 Implementation of the subject of “Corporate Social Responsibility Entrepreneurship” into the study programme of Industrial Management in the second degree of studies at STU MTF Trnava.
Conclusions

Results of the questionnaire survey conducted in 2013 among all students of STU MTF Trnava showed that 70% of the students are interested in the prepared subject of Sustainable Corporate Social Entrepreneurship (SCSE). According to this questionnaire survey focused on strategic management course in the winter semester of the academic year 2013/2014, 69% of students were interested in the new SCSE subject, which represents nearly identical results. This confirms that the concept of CSR is the only alternative in the direction of sustainability in the theory, practice and implementation in Slovakia and in the world. It also inspire us to continue our work, to extent the knowledge, abilities and skills that form the profile of graduates in the Bachelor, Master and PhD. studies at STU MTF Trnava.

From our point of view, the SD and CSR concepts are an important contribution to addressing global and local problems. To implement them in business practice, it is necessary to teach the young generation about the importance and opportunities of the above-mentioned concepts, and prepare the ground for future generations for further development of these ideas. Therefore, we consider integration of the issues of SD and CSR into curricula in all Slovak schools as beneficial.

We can mention the subjects/courses or study programmes regarding the area of CSR and SD in a number of schools worldwide, e.g.:

1. Corporate Social Responsibility at Harvard Kennedy School,
2. Corporate Social Responsibility at University of Calgary,
3. Corporate Social Responsibility at Lulea University of Technology,

and study programmes, for example:

1. Corporate Social Responsibility at University of Nottingham,
2. Business, Human Rights, Law and Corporate Social Responsibility at Open University,
3. Corporate Social Responsibility with Environmental Management at University of York.


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