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# INTEGRATED INFORMATION

International Conference on Integrated Information

Kos, Greece      September, 29 – October, 3 2011

EDITORS

Georgios A. Giannakopoulos  
*Technological Educational Institute of Athens, Greece*

Damianos P. Sakas  
*University of Peloponnese, Greece*

**All papers have been peer-reviewed**



**Piraeus, Greece, 2011**

## Editors

Georgios A. Giannakopoulos

Technological Educational Institute of Athens  
Faculty of Management and Economics  
Department of Library Science and Information Systems  
Address: Aghiou Spyridonos Street, 12210, Egaleo  
E-mail: [gian@teiath.gr](mailto:gian@teiath.gr)

Damianos P. Sakas

University of Peloponnese  
Faculty of Science and Technology  
Department of Computer Science and Technology  
Address: End of Karaiskaki St., 22100, Tripolis, Greece  
E-mail: [D.Sakas@uop.gr](mailto:D.Sakas@uop.gr)

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# **Preface: Proceedings of the International Conference on Integrated Information (IC-ININFO 2011)**

GEORGIOS A. GIANNAKOPOULOS

*Department of Library Science and Information Systems, Technological Educational Institute of Athens, Aghiou Spyridonos, Egaleo, 12210, Greece*

DAMIANOS P. SAKAS

*Department of Computer and Technology Science, University of Peloponnese, Praxitelous 89-91, Piraeus, 18532, Greece*

## **Aims and Scope of the Conference**

The International Conference on Integrated Information 2011 took place in Kos Island, Greece, between September, 29 and October, 3, 2011. IC-ININFO is an international interdisciplinary conference covering research and development in the field of information management and integration.

The conference aims at creating a forum for further discussion for an Integrated Information Field incorporating a series of issues and/or related organizations that manage information in their everyday operations. Therefore, the call for papers is addressed to scholars and/ or professionals of the fields of Library and Archives Science (including digital libraries and electronic archives), Museum and Gallery Studies, Information Science, Documentation, Information Management, Records Management, Knowledge Management, Data management and Copyright experts the latter with an emphasis on Electronic Publications. Furthermore, papers focusing on issues of Cultural Heritage Management and Conservation Management are also be welcomed along with papers regarding the Management of Nonprofit Organizations such as libraries, archives and museums.

One of the primary objectives of the IC-ININFO will be the investigation of information-based managerial change in organizations. Driven by the fast-paced advances in the Information field, this change is characterized in terms of its impact on organizations that manage information in their everyday operations.

Grouping emerging technologies in the Information field together in a close examination of practices, problems and trends, IC-ININFO and its emphases on integration and management will present the state of the art in the field. Addressed jointly to the academic and practitioner, it will provide a forum for a number of perspectives based on either theoretical analyses or empirical case studies that will foster dialogue and exchange of ideas.

## **Topics of general Interest**

Library Science, Archives Science, Museum and Gallery Studies, Information Science, Documentation, Digital Libraries, Electronic Archives, Information Management, Records / Document Management, Knowledge Management, Data Management, Copyright, Electronic Publications, Cultural Heritage Management, Conservation Management, Management of Nonprofit Organizations, History of Information, History of Collections, Health Information

## **Symposia**

The Conference offered a number of sessions under its patronage, providing a concise overview of the most current issues and hands-on experience in information-related fields.

- Symposium on Integrated information: Theory, Policies, Tools
- 4th Symposium on Business and Management and Dynamic Simulation Models supporting management strategies

- Session on Open Access Repositories: Self-archiving, Metadata, Content policies, Usage
- Session on Evidence-Based Information in Clinical Practice
- Session on Business Management and Communication Strategies supporting Decision Making Process in Tourism Sector
- Session on Electronic Publishing: A Developing Landscape
- Session on Information and Knowledge Management
- Session on Information Content Preservation as Outcome of Conservation of Cultural Heritage: Ethics, Methodology and Tools
- Session on Advances Information for Strategic Management
- Session on Information History: Perspectives, Methods and Current Topics
- Session on Divergence and Convergence: Information Work in Digital Cultural Memory Institutions
- Session on Contemporary issues in Management: Organisational Behaviour, Information Technology, Education & Hospital leadership.

The wide range of aspects that the sessions covered, highlighted future trends in the Information Science.

### **Paper Peer Review**

More than 300 papers had been submitted for consideration in IC-ININFO 2011. From them, 91 were selected for presentation, after peer review in a double blind review process. The accepted papers were presented at IC-ININFO 2011.

### **Thanks**

We would like to thank all members that participated in any way in the IC-ININFO 2011 Conference and especially:

- The famous publishing house Emerald for its communication sponsorship.
- The co-organizing Universities and Institutes for their support and development of a high-quality Conference scientific level and profile.
- The members of the Scientific Committee that honored the Conference with their presence and provided a significant contribution to the review of papers as well as for their indications for the improvement of the Conference.
- All members of the Organizing Committee for their help, support and spirit participation before, during and after the Conference.
- The Session Organizers for their willing to organize sessions of high importance and for their editorial work, contributing in the development of valued services to the Conference.
- PhDC Marina Terzi for her excellent editorial work, contributing in the production of the Conference proceedings.

## CONFERENCE DETAILS

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Dimitris Kouis, Greek Ministry of Education, Lifelong Learning and Religious Affairs  
Dionysis Kokkinos, National Technical University of Athens

## KEYNOTE SPEAKER



Professor Amanda Spink

Professor Amanda Spink has published over 340 scholarly journal articles, refereed conference papers and book chapters, and 6 books. Many of her journal articles are published in the Journal of the American Society for Information Science and Technology, Information Processing and Management, and the Journal of Documentation. She is Editor of the Emerald journal Aslib Proceedings. Amanda's research has been published at many conferences including ASIST, IEEE ITCC, CAIS, Internet Computing, ACM SIGIR, and ISIC Conferences. Her recent books include Information Behavior: An Evolutionary Instinct and Web Search: Multidisciplinary Perspectives, both published by Springer. Amanda's research focuses on theoretical and empirical studies of information behavior, including the evolutionary and developmental foundations. The National Science Foundation, the American Library Association, Andrew R. Mellon Foundation, Amazon.com, Vivisimo. Com, Infospace.com, NEC, IBM, Excite.com, AlltheWeb.com, AltaVista.com, FAST, and Lockheed Martin have sponsored her research. In 2008 Professor Spink had the second highest H-index citation score in her field from 1998 to 2008 [Norris, M. (2008)]. Ranking Fellow Scholars and their H-Index: Preliminary Survey Results. Loughborough University, Dept of Information Science Report].

# Sustainable Development and Corporate Social Responsibility in Higher Education: Some Evidence from Greece

Anastasios Sepetis<sup>†</sup> and Fotios Rizos<sup>‡</sup>

<sup>†</sup> Administrator of the Hospitals of Chalcis, Karystos and Kimi, gazepi 48, chalcis  
tsepet@env.aegean.gr

<sup>‡</sup> University of Piraeus, M. Karaoli and Dimitriou 80, Piraeus 18534, Athens, Greece  
rizosfotis@yahoo.gr

**Abstract:** *The scientific community strongly argues that companies that implement proper business strategies and their legal regulation can be economically benefited by the social (or moral) and environmental (or ecological) innovation. In this aspect, the scientific and academic knowledge that is provided by educational institutions, along with the integration of environmental, social and sustainable management policies, will supply the future graduates with the necessary provisions in order to meet the need of the market. During the last two decades, the fields of corporate social responsibility and environmental protection have been covered by a numerous academic departments and educational institutions and there can be found in the International, and in our case, in the Greek Higher Education.*

*Meanwhile, activities of non-typical education along with other educational processes have developed and their purpose is the promotion of social responsibility in the previous institutions. In this study, it is going to be presented the efforts as well as the interventions that have been made in national level and have as outer goal the connection of business society with universities, so that to promote sustainable development.*

**Keywords:** Corporate social responsibility; education for sustainability; higher education curriculum; intellectual and moral leadership; management/ business schools; resistance to change; stakeholders; sustainability; sustainability and CSR learning programs.

## I. INTRODUCTION

In our era, education and training form the basis for sustainable development. The international bodies and the European Union are encouraging the efforts of their members in order to develop more strategic approaches to share knowledge and best practices so that they will promote education for sustainable development (ESD). The "Updated Strategic Framework for European Cooperation in Education and Training" of the Commission, will be governing the European cooperation in this area until 2020. The majority of studies that investigate the issue of sustainable development in higher education have focused their attention in the economic universities or schools of business, where there can be found a considerable number of relevant and interrelated specific issues, such

as the relation between marketing and business ethics (Shannon and Berl, 1997), the sustainability (Wheeler et al, 2001) or the evaluation criteria for courses of business ethics (Morris, 2001). Most researches are strictly focused in the scientific field of business ethics.

Based on this fact, the founder of the European Network of Business Ethics, states that business ethics is not necessarily the most popular term, based on which business and social issues have been analyzed and discussed in several European countries, the last decades (Van Luijk, 2001). The success of these actions is being determined by companies, E.U. and by other international bodies and it can be considered, among others, as a result of the human factor who has been trained by various training programs in universities (Ceulemans et al, 2011) and technological institutes (Benn and Rusinko, 2011). The goal of these programs, which is often "baptized" in the international literature as training programs for corporate social responsibility and programs for environmental (and ecological) education and sustainable development, intend to prepare employees, future managers and citizens in general, who will help the social, environmental and sustainable business performance.

## II. THE INTEGRATION OF SUSTAINABLE DEVELOPMENT INTO HIGHER EDUCATION

The integration of actions related to sustainable development in the field of education, within the cooperation framework of central public administration with companies, is fairly recent and rather limited (Moon and Orlitzky, 2011). The first comprehensive intervention for the integration of CSR on academic education in Europe was in late 1980 by Professor Mahoney in the form of a comparative study on the teaching of business ethics in the U.S.A., U.K. and The Continental Europe (Mahoney 2004). Despite the originality of the field of research, the findings show that even within the narrow scope of "business ethics", there is a wide variety of terminology of CSR in various European countries and their philosophical and social traditions.

A recent research, which was conducted by Professor Moon and Matten, was performed with questionnaires from 166 schools of Economics and Business Administration, in Europe (Moon and Matten,

2004). It is interesting that only 2/3 of the respondents (faculty and students) argued that the faculty of their schools was active as far as the CSR research is concerned and only one quarter of the staff provides supervision of doctoral thesis in this field. These findings support the fact that the overall development of education in CSR, is not due to academic research but due to other numerous causes. It is also noted that CSR, in the broader sense, is now on the agenda of the learning procedure and the teaching courses for CSR are led mostly by the interest of industry rather than academic research.

Besides, the researches of Moon and Matten, there have been published more interdisciplinary researches (Case studies) on the mainstreaming of CSR into European universities, highlighting as priority areas the business ethics (Zsolnai, 1998), the social dimensions of entrepreneurship (Cummins, 1999) and the instructional technics of CSR (Cowton and Cummins, 2003). The findings of most studies have concluded that CSR is still a mandatory part of the formal education process. Another important indicator of the relevance between CSR and schools of Economics and Business Administration is the way of finance of this new scientific field (Ceulemans et al, 2011). The fact that only 35% of the respondents answered that question in the research of Moon and Matten, reveals that it is not considered as main priority. In another level, the study of Professor Idowu, examined whether the universities of U.K. are interesting in implementing CSR in their business operations (Idowu, 2008).

Similar findings can be found in the study of Setó-Pamies and his associates for Spanish universities (Setó-Pamies, 2011). According to the previous conclusions, there can be determined that in our days, the integration of CSR in the curriculum and also the funding for the education and research on CSR in the schools of Economic and Business Administration by public agencies, besides the fact that they are not significant, however, they are developing dynamically (Benn and Kramar, 2011).

From the middle of the decade of 2000, field investigations have documented the growing desire of students and demand for CSR's mainstreaming in the educational process let alone the traditional Schools of Economics and Business Administration<sup>99</sup>. Many researchers point out, that for the promotion of relevant educational programs, it is required the proper demand from businesses and organizations of civil society (Maignan and Ralston, 2002) for the development of moral conscience of education (Goshal, 2003). However, many business organizations and chambers do not consider of great importance the universities' finance for research on CSR, in a period of intense

economic recession<sup>100</sup>. However, several universities express strong interest in further cooperation with the business sector in various ways, including:

- Corporation with companies as far as the practice of students is concerned
- Development of research on CSR in small and medium companies
- Development of educational tools for lifelong learning and e-learning on CSR
- Develop operational tools such as environmental and sustainable accounting
- Develop partnerships for the implement of quality systems and environmental management.
- Achieve their business strategic objectives by attracting prospective students from minority groups
- Develop and demonstrate their performance on the sustainable development, under the requirements of the Higher Education Partnership for Sustainability – HEPS
- Contribute positively on the national and international assessment of their universities' education
- Handle the economic, social and environmental impact of their activities
- Include the view of their stakeholders in their decision making under corporate governance, to meet the social needs in terms of modern education and innovation
- Demonstrate a more effective charitable work
- Promote an environment that offers new opportunities and inspiration for students in order to improve their scientific and personal status as future citizens
- Provide a sustainable educational system with added value to culture, economy and natural environment
- Manage and regulate social issues in universities with responsibility and sensitivity.

Today the market has already developed a broad understanding of the business community, which argues that a significant proportion of economic growth is being determined by social, environmental and sustainable innovation and by the implementation of social, environmental and sustainable knowledge gained from operational training programs. In another aspect, corporate social responsibility and policies for environmental protection are incorporated slowly in the educational process and in the curriculum of universities and technological institutions that seek to educate future managers so that they will be able to face environmental and social problems.

<sup>99</sup> Available through the internet: <http://www.beyondgreypinstripes.org/> [accessed: 18/02/2012]

<sup>100</sup> This approach is confirmed in the research and intervention of van Luijk, who argues that business ethics in Europe as an academic subject has been treated as a problem (e.g. environmental issues) in the business sector and has not evolved the cooperation between academic research and business practice

### III. GOOD PRACTICES FOR THE IMPLEMENTATION OF SUSTAINABLE DEVELOPMENT INTO EDUCATION POLICIES

Many universities throughout the world have implemented CSR activities in their business operation in order to promote and integrate corporate social responsibility. Also, the development of training programs for corporate social responsibility can be found under the form of undergraduate or graduate programs, with or without the cooperation of the business sector. Similarly, the development of social and environmental educational programs can include special seminars of general knowledge. In parallel, there can be exploited the potential of new technology for asynchronous distance education. All these perspectives offer important action opportunities in a field that considered the significant demand, there is not provided the same offer.

In several universities in the U.S.A, there have been developed interdisciplinary training programs on CSR. The CSR Program of the Harvard Business School explores the challenges and opportunities of the present and future models of CSR, providing the necessary framework for the education of future business executives and stakeholders. It has been developed specifically for the senior business executives that are responsible for CSR issues and for the future policy-making executives in the field of environmental protection. It provides practical knowledge and tools to improve decision making, risk management, performance measurement of social value of a corporation. In Great Britain, the mainstreaming of CSR in the educational process is promoted by the British Council and from academic institutions like the International Centre for Corporate Social Responsibility of the University of Nottingham<sup>101</sup>. The ICCSR was founded in 2002 for the research and education of corporate social responsibility. Its main activities have increased and now ICCSR except for specialized supervision of doctoral thesis and studies in CSR, implements highly specialized graduate programs (MA in CSR and MBA in CSR).

INSEAD, in France, promotes the cooperation between business practice and academic research. The staff of INSEAD conducts research on social and environmental issues related with businesses since 1960, examining issues such as eco-industry, strategies for sustainability, corporate social responsibility, climate change and energy management. Also social and environmental issues are taught in all educational programs. For example, their MBA offers specialized training on Environmental Management in the global economy that focuses on the environmental challenges that businesses are facing. INSEAD has also committed

to minimize the impact of business operations of the university to environment, with the implementation of systems and practices to reduce energy use and resources they consume, the recycling of paper, waste products by replacing toxic products with non-toxic and with the environmental education of students and its staff. ISTUD102 in Italy was founded in 1970 by a group of leading Italian and multinational companies (including Pirelli, Olivetti and IBM), contributing significantly to the spread of modern "management culture" in Italy. The Center for European Economic Research (ZEW)<sup>103</sup> of Mannheim in Germany is a non-profit, independent institute with the legal form of limited liability company (GmbH). It was founded in 1990 by a public-private initiative in the Land of Baden-Wuerttemberg in cooperation with the University of Mannheim. ZEW is one of the leading economic research institutes in Germany, and has very good reputation throughout Europe for its researches into policies related to economic models linking corporate social responsibility and environmental management.

The most representative body to promote the integration of CSR in the educational process is the CBS Center for Corporate Social Responsibility<sup>104</sup> of the School of Business Administration (University of Copenhagen). CBS was founded in 2002 in order to maintain the companies' attention about issues related with values, ethics and social responsibility, to promote further adoption of socially responsible practices and strategies for sustainable development by educational institutions, the international organizations like the UN, World Bank, OECD, European Union support an alliance between the productive sector and the educational process that promotes as a general framework for the initiatives taken to integrate CSR and policies for sustainable development in the real economy. In 2007, under the Principles of the Global Compact (UN Global Compact)<sup>105</sup> it was created the PRME (Principles for Responsible Management Education)<sup>106</sup> to provide a framework for engagement to promote corporate social responsibility through the incorporation of universal values in curricula and research. The Principles have been created by an international working group of sixty deans, university presidents and official representatives of leading business schools, under the supervision of all academic

<sup>101</sup> Available through the internet: <http://www.nottingham.ac.uk/business/ICCSR/research.php?c=7> [accessed: 18/02/2012]

<sup>102</sup> Available through the internet: <http://www.istud.it/en> [accessed: 18/02/2012]

<sup>103</sup> Available through the internet: <http://zewtest.zew.de/en/daszew/daszew.php3?mi=ZEW> [accessed: 18/02/2012]

<sup>104</sup> Available through the internet: [http://uk.cbs.dk/research/departments\\_centres/institutter/cbscsr/menu/research\\_profile](http://uk.cbs.dk/research/departments_centres/institutter/cbscsr/menu/research_profile) [accessed: 18/02/2012]

<sup>105</sup> Available through the internet: <http://www.unglobalcompact.org> [accessed: 18/02/2012]

<sup>106</sup> Available through the internet: <http://www.unprme.org> [accessed: 18/02/2012]

institutions of the Global Compact. The Environmental Education is fundamental to achieve sustainable development. The United Nation Environmental Training Program<sup>107</sup> promotes attitudes and value systems that affect the environment and ethical behavior by developing understanding, skills and values that enable people to participate as active citizens and will be informed for the development of an ecologically sustainable and socially equitable society.

The basic strategic direction of the World Bank<sup>108</sup> in the field of CSR is to help countries integrate education into national policies of economic development. The World Bank began lending program for education since 1963 and today is the largest source in the world of external finance for developing countries for education. World Bank has committed to help countries achieve fundamental objectives, such as Education For All-EFA and Education for the Knowledge Economy-EKE. Apart from previous activities, the World Bank operates as a database of knowledge, and the results of its educational research and best practices in the implementation of innovative educational practice of CSR. The OECD explores the broader implications of education for individuals and societies and helps countries to promote opportunities for people despite of their social status and age. Its goal is to ensure that education systems will avoid perpetuating social and economic minority and will contribute in the development and in the social equity (OECD, 2001). The work of OECD includes the establishment of comparable educational indicators, most well-known the Research of Education at a Glance, which basically assesses progress on the creation of socially true and holistic education. In September 2004 was founded, with the financial support from the European Community under the Sixth Framework Program of the European Union for Research and Development (FP6), the CSR Platform<sup>109</sup>. The purpose of the Platform<sup>110</sup> is to

motivate researchers to support and develop researches on corporate social responsibility in society issues in the European Research Area (ERA).

#### IV. THE INTEGRATION OF ENVIRONMENTAL AND SUSTAINABLE POLICIES IN THE GREEK HIGHER EDUCATION

Until recently, the subject of business ethics, CSR and environmental management, neither have they been taught in the schools of economics and business administration of Greek institutions nor was any reference to them. During the last few years, firstly at the graduate level and then at the undergraduate level, some Greek universities had introduced elective subjects that concerned business ethics and CSR. In most cases of the Schools of Economics and Business Administration, the issue has been covered only partly by a small number of professors, who gave a different aspect of CSR to students due to other courses. Today, the subjects of business ethics, CSR and sustainable development as separated subjects are been taught by several Greek universities and technological institutions in their curriculum such as:

- The department of “Administration of Health Units and Welfare” of T.E.I. Athens teaches at undergraduate level, the course of “Environmental Management and Public Health”
- The department of “Business Administration” of the University of Piraeus teaches at undergraduate level, the course of “Business Ethics” as an elective one
- At the graduate curriculum of “Marketing and Communication of New Technologies” of the Economic University of Athens, “CSR” is taught as a separate subject in the direction of Communication
- The department of “Accounting and Finance” of the University of Macedonia teaches as an elective subject at the undergraduate level, the “Action Plan for the Development of CSR”, in the field of education, Corporate Governance, Corporate Social Responsibility and financial performance of companies
- In the department of “Marketing and Operations Marketing” of the University of Macedonia, “CSR” is taught as an elective subject
- The department of “Communications, Media and Culture” of the Panteion University teaches at the undergraduate level, the course of “Social Issues and Business Practices” along with “Business Ethics”
- The department of “Environmental Engineering” of Democritus University of Thrace teaches at undergraduate level the course of “Economics of Sustainable Development”
- The department of “Accounting and Finance” of the Economic University of Athens teaches at undergraduate level the course of “Business Ethics”
- The department of “Marine and Business Studies” of the Aegean University teaches at undergraduate level the course of “Business Ethics”

<sup>107</sup> Available through the internet:

<http://www.unep.org/trainin> [accessed: 18/02/2012]

<sup>108</sup> Available through the internet:

<http://www.worldbank.org> [accessed: 18/02/2012]

<sup>109</sup> Available through the internet:

<http://www.eabis.org/csrplatform> [accessed: 18/02/2012]

<sup>110</sup> The platform was designed by the European Academy of Business in Society (EABIS) and its members are: The European Foundation for Management Development (Belgium), Ashridge Business School (UK), Copenhagen Business School (Denmark), Cranfield School of Management (UK), INSEAD (France), Vlerick Leuven Gent Management School (Belgium), Warwick Business School (UK), Leon Kozminski Academy of Entrepreneurship and Management (Poland), Warsaw School of Economics (Poland), Catholic University Eichstätt-Ingolstadt (Germany), The Copenhagen Centre (Denmark) and CSR Europe (Belgium)



- In the department of “Home Economics and Ecology” of the Harokopeio University, there can be found a Master degree entitled “Sustainable Development”
- The National Technical Metsovion University teaches at undergraduate interdepartmental level, the course of “Environment and Sustainable Development”
- In the department of “Civil Engineering” of the Aristoteleion University of Thessalonica, there is a Master degree entitled “Environmental Protection and Sustainable Development”
- The department of “International and European Studies” of the Panteion University and in the postgraduate program in “International and European Studies”, it provides expertise direction into “Environmental Governance and Sustainable Development”
- In the department of Environment of the Aegean University, there can be found an interdepartmental graduate program in collaboration with foreign universities, entitled “Environmental Policies and Management”

Furthermore, several universities and technological institutes run departmental courses of entrepreneurship in the undergraduate or graduate curriculum and in those, there can be found issues related to Corporate Social Responsibility, Business Ethics and Environmental Management. Taking into account that the role of higher education in Greece is being formed not only from the transportation and transmission of knowledge, but also from the shaping of responsible citizens, it is worth to be mentioned three successful cases of Greek universities that have developed important activities in programs of non-formal social and environmental education and have integrated the environmental component in their internal practices.

These initiatives can be considered of high importance, because they contribute extensively in the achievement of this broader goal. The University of Macedonia<sup>111</sup>, is the first university in Greece and one of the few in Europe that has designed and implemented an Environmental Management System and Control, based on the European standard EMAS<sup>112</sup>. The “MBA International” of the Economic University of Athens, is an international Master program in Business Administration with eight thematic and international orientations and is already in the tenth year of operation. For two years, the i-MBA<sup>113</sup> has signed and has taken part in the initiative of the United Nations, the Global Compact and had applied its ten principles in its

operations. The Aegean University is one of the few universities in Greece that has the privilege of an independent Environmental Department. The laboratory of environmental policies and management which is part of the Environmental Department, supports activities for the development and implementation of the environmental strategies of the University and has set as target “The greening” of the Aegean University<sup>114</sup>. Thus, it has developed a series of eco-friendly actions which are in progress in Mytilini and have been conducted in collaboration with other institutions. The case of the Aegean University proves that practices for environmental management can be developed easily beyond its environmental certification, even in a semi-formal way.

The cooperation of companies with specialized academic institutions is proved of high importance for the successful outcome of its efforts. In Greece, in 2010 the Institute for Social Innovation<sup>115</sup> conducted a survey for the Ministry of Education about the interconnection of education and businesses involved in the Greek Network of CSR and have embraced the principles of Global Compact. Empirical research was conducted and questionnaires were sent to 124 companies of which 34 responded. The major findings of the survey are represented below.

Almost all of the Greek companies that have participated in the survey had contributed a great amount of money in social activities while the majority of them spent a significant amount of money in actions related to education. This indicates that education remains an attractive field of expression of contribution or charity of Greek companies which traditionally was a reference point for linking the companies’ name with social service and the enhanced corporate image. Less than half of the companies that performed voluntarily actions which concerned education, measure systematically the results and /or the impacts of the intervention, using a standardized system. From this point of view, they cannot determine the precise results of the contribution and it seems that the main motive is mostly “instantaneous” for communicative reasons and less for long-term value of the social capital of the economic and social “payback” of this certain social contribution. Furthermore, the majority of the companies that participated in the survey, publish their implementing actions that support the field of education, utilizing corporate ways of communication (newsletters, internet, annual social reports) while a few companies inform the public authorities with the previous ways. This fact is evidence that may explain the failure of information of the Ministry of Education about the contributing business activities.

<sup>111</sup> Available through the internet:

<http://afroditi.uom.gr/emas/> [accessed: 18/02/2012]

<sup>112</sup> Performed in the framework of the program EMAS-EDIN/LIFE02 (2002-2005)

<sup>113</sup> Available through the internet:

<http://www.imba.aueb.gr/csr.htm> [accessed: 18/02/2012]

<sup>114</sup> Available through the internet:

<http://www.env.aegean.gr/eeppd/labgreenGR.htm> [accessed: 18/02/2012]

<sup>115</sup> Available through the internet:

<http://www.csrservices.gr/> [accessed: 18/02/2012]

The survey has also showed that even primary schools, high schools and universities have contacted with companies asking for cooperation and support of an action, while several requests had come from NGO related to education. Six out of ten companies have declared to receive such requests. That indicates that it is a quite widespread perception in the educational community, that some activities may be supported by voluntarily resources of companies as far as their corporate responsibility is concerned. Regarding the characteristic of the contributing actions in education, the survey showed that most of the companies prefer actions of direct financial/material contribution (scholarships, enhancement of logistics) that do not require any specific preparation and active involvement from the part of the donor. Despite the previous, actions that concern the design and implementation of educational programs with social or environmental content and action that connect companies with universities and technological institutes that demand more complicating organizational procedures, seem more attractive for a significant part of companies from the sample, fact quite encouraging for the development of a more conscious and long-term vision for the contribution of the voluntary business in the improvement of education. The same type of actions seems to gather high potential of activation, by the companies of the survey, in the next few years, confirming the gradual transition from traditional donations for scholarships and logistics into more active actions for the overall betterment of the educational process.

Finally, the opinions of the responders about the priorities of the educational system reflect the respective approaches with their preferences in terms of the promotion actions of CSR in the field of higher education in Europe. There are many who put into high priority the equal access for all children to education and the improvement of logistics and there is a great number of respondents who put into high priority issues that concern the introduction of computerization and new technologies, the development of general skills, the innovation's ability, creativity and entrepreneurship, the environmental management, business ethics and the satisfaction from learning foreign languages. It seems that companies seek and want to improve an educational system, which will upgrade the human capital of the country, equipping young people with skills and knowledge that can be usable by companies. In the same direction, many respondents believe that a key priority point is the promotion of social accountability and evaluation of educational units, expressing in this way the companies' desire for efficiency increase and transparency of the educational process.

#### **V. DISCUSSION ON INTEGRATING SUSTAINABLE DEVELOPMENT INTO EDUCATION**

The main issue that arises from the gradual integration of social and environmental issues in business and

education process is the nature of these educational issues. The new educational programs for corporate social responsibility and the new complex concepts of corporate social responsibility and environmental education differs from the traditional concepts of the traditional education programs taught in various educational institutions and are applied to organizations. Therefore, the programs of social, environmental and sustainable education should disseminated throughout the education system and should integrate relevant courses to undergraduate and postgraduate curricula and not exclusively in Universities of Economics and Administration, so that there will be able to aim in the change of students' perception and of the knowledge of the future business executives. Moreover, with the proper and effective cooperation with the business sector, there can be implemented a group of broader issues concerning corporate social responsibility and environmental protection or the modern concept of sustainable development and mechanistic processes and not only successful operational business objectives.

Nowadays, business expenditure on research and development (R & D) related to the concept of corporate social responsibility and environmental protection policies is a powerful type of investment fund, in terms of their ability to improve long-term growth prospects. Also, at the operational level, they are leading to innovation and market growth by increasing the level of business sector and the (direct) sharing to the rest of the economy (Mahoney and Roberts, 2003). Through the results of diffusion, all costs of R & D are considered to affect positively the market's development. The costs and expected returns of R & D for new social, environmental and sustainable products (consumption or investment) tend to be specific in market, like chemical producing industries, pharmaceuticals and information technology where the future expected profits are being protected by patent legislation. By the protection of the value of the intellectual capital, these ethical, green and sustainable innovations and markets, which promote them, are expected to gain profits. Moreover, it strengthens the economy as a whole by buying rights to the application of new sustainable technical innovations, created by innovative technological business to outdated technology companies while failing to create new processes, they are able, after coping them, to use them in production (Porter and Linde, 1995). Most models that are presented in the international literature (Beisea and Rennings, 2005; Cornelius et al, 2002), focus their attention in the preparation of workers, in order to help the company to implement effectively the quality and environmental management systems.

To achieve these goals, most companies are planning training programs that usually prepare their employees to help implement the goals of corporate social responsibility and environmental policy. The successful completion of voluntary and mandatory social and environmental practices requires proper



training and sensitization from the part workers in enterprises (Madsen and Ulhoi, 2001). This leads to the fact that several social and environmental educational programs to be designed and implemented by many modern businesses. Relevant educational programs are being designed to raise awareness, knowledge and the abilities of employees, so that to develop attitudes and behaviors friendly towards society and the environment. These behaviors and attitudes of workers normally are confined within the framework of the business.

In this aspect, most companies that implement strategies for society and environment spent a big amount of funds for social and environmental education of their staff, with outer goal the betterment of their sustainable performance. Thus, this practice limits the broader goal of social and environmental education, as defined in international textbooks on entrepreneurship education, considers employees as an exclusive part of the production process (with the strict economic definition) and leaves out other aspects of their personality, i.e. as consumers, parents, owners, citizens and other aspects, that with their daily behavior, have negative impact towards the environment. Consequently, in the field of the human factor, the accountability of these programs, is not normally to be limited to operational objectives that will remain inside the company but it should be taken into account by external attitudes and behavior of employees, so that they will act as good and concerned citizens in social and environmental issues within the social welfare.

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