

SÁNDOR KERÉKES<sup>1</sup> – KONRAD WETZKER<sup>2</sup>

## DOES MANAGEMENT EDUCATION CREATE RESPONSIBLE MANAGERS? VIEWPONT

*The integration of sustainability and responsibility into management education is a widely discussed issue in the literature and in practice. As a result of a lifelong experience of teaching sustainability, environmental management and further related courses at university level, the authors aim to give their viewpoint about Responsible Management Education (RME). The concept of RME relies on the basis of several similar categories, used in today's higher education but is aimed to mean more than just another slogan for the same content. Three issues are discussed in the paper. (Q1) Should we limit the focus of management education on the classical business targets like profit and growth, as well as the preconditions to achieve those targets – or should we establish a different philosophical background for business thinking and teaching: the Responsible Management? (Q2) Should the concept of Responsible Management be integrated in the classical business courses or should it be a specific, independent course? (Q3) How to combine teaching methods to reach the ultimate goal of creating responsible managers via management education?*

*The literature review is aimed to give a profound background to the relevance and development of the term Responsible Management Education, followed by the explanation of sceptical and positive arguments regarding the introduction of the concept into the existing course structure. The authors also elaborate a potential methodology for teaching Responsible Management.*

### 1. INTRODUCTION

Is Responsible Management Education (RME) a slogan, a buzzword, or is it more? What is its relationship to the large number of similar categories such as teaching about Corporate Social Responsibility, Corporate Citizenship, Social Performance or Responsible Business? Here we present our view regarding the meaningfulness of Responsible Management Education. Several papers are emphasizing the role of higher education institutions in representing and supporting the values, knowledge and actions in order to prepare students to be change agents and transform society from unsustainable, irresponsible to more sustainable and responsible patterns (Huisingh, 2006, Lozano et al., 2014, Hesselbarth and Schaltegger, 2014). The integration of sustainability issues into university curricula are discussed by Lozano and Young, (2013), while teaching methods are tested among others by O'Brien and Sarkis (2014), Steiner and Posch, 2006, as well as Du et al. (2013).

<sup>1</sup> professor emeritus, Institute of Geography, Geoeconomy and Sustainable Development, Corvinus University of Budapest

<sup>2</sup> professor, Institute of Geography, Geoeconomy and Sustainable Development, Corvinus University of Budapest

An ultimate message from those papers is that motivation and perceived effectiveness are key factors of behavioral change (see also Vicente-Molina et al., 2013, Zsóka et al., 2013).

Traditionally, at economic universities and business schools, also management courses including responsibility- or sustainability-related topics have been very heavily focused on the business perspective. The proven methods to work with facts and figures, mathematized and monetarist models, as well as case studies are widely used also in this area. On the other side ethical issues, sustainability and social responsibility are softer areas which make careful consideration, emotional intelligence and different teaching approaches necessary.

Teaching such a soft, complex, fuzzy topic like responsible management is difficult and non-mainstream. Based on more than forty years of experience the authors underline the importance of being illustrative, simple and well-structured. These are the key prerequisites to achieve that curious, open-minded and sceptical students are sitting in the classroom, having a lot of questions and being ready to provide and accept non-conform answers.

## **2. CLASSIFYING THE PROBLEM**

### **2.1. BACKGROUND**

The authors of this paper have the pleasure of teaching in a classical Business School, including an Executive MBA course. In parallel, they teach Master's classes within the frame of the university's more mainstream academic education. In the Master level courses the focus is more on explaining the concepts and practice of Sustainability and Corporate Social Responsibility, while in the Executive MBA course Strategic Thinking is emphasized and elective courses about Sustainability and Business Ethics are provided.

Our courses present the 'softer side' of economic disciplines; hence they must necessarily include components of philosophy, ethics, environmental issues, social responsibility and regulatory compliance. We share the opinion of the former Steve Jobs, the legendary father of Apple, that students focus too much on business "science" and too little on philosophy, arts and other areas (Isaacson, 2011).

This perspective is in harmony with some recent discoveries from research: "the stress should be on developing in the student the capacity to appreciate, understand, enlarge upon, and use in his daily life, what he learns in his liberal arts courses" (Gordon & Howell, 2010, p. 115) At the same time, in Central Europe the so-called Bologna process has proceeded in just the opposite direction. So-called "liberal arts" subjects have almost disappeared from business education. They have mainly been replaced with academic business courses. Previously, in a 300 credit master's program with Marketing specialization, marketing-related credits accounted for 30 credits; in the Bologna BA program this figure is now 180 and in the MA program more than 120 credits. What has totally disappeared from the program is the history of economic theory, philosophy, sociology, political sciences, geography, etc. Basically, those subjects that could be the foundation of business ethics or responsible management education are missing.

In 1986, before the transition started, Peter Drucker had stated that: "The communist reformers, first in Yugoslavia, then in Hungary, and finally, in Czechoslovakia, demanded managerial autonomy; that demand was at the centre of their opposition to Stalinism. In part, of course, their motives were economic. But in equal measure, they looked to management as a force to reform government and society. Management to them embodied specifically Western values: the value

of individual responsibility, the value of autonomy, respect for the individual. Management, precisely because it is not a political program but a social and economic function, became their hope for the preservation of their culture and society in the Western tradition” (Drucker 1986, p. 19).

After the transition, both practitioners and the academic community forgot about the above mentioned explanation and Milton Friedman’s ideas were mainstreamed. His well-known statement was widely accepted: “there is one and only one social responsibility of business—to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud” (Friedman, 1962, p. 133). Still more definite in the Wall Street Journal, Aneel Karnani wrote “It’s not surprising that this idea has won over so many people—it’s a very appealing proposition. You can have your cake and eat it too! But it’s an illusion, and a potentially dangerous one. Companies that simply do everything they can to boost profits will end up increasing social welfare. In circumstances in which profits and social welfare are in direct opposition, an appeal to corporate social responsibility will almost always be ineffective, because executives are unlikely to act voluntarily in the public interest and against shareholder interests. Irrelevant or ineffective, take your pick” (Karnani, 2010).

Teaching in Hungary – as part of the transformed countries – we face at the moment two „**technical**” barriers, when dealing with responsible management education. On one hand Eastern European Managers seem to be eager to show that they are “real mainstream, profit oriented” managers without any limits. The content of management education often reflects it as well. On the other hand, the Bologna process cuts the time to deal with issues of responsible management education.

We fully agree with Peter Drucker’s very simple explanation of a business enterprise: “Business enterprises – and public service institutions as well – are organs of society. They do not exist for their own sake, but fulfil a specific social purpose to satisfy a specific need of society, community, or individual. They are not ends in themselves, but means. The right question to ask in respect to them is not, What are they? but, What are they supposed to be doing and what are their tasks?” (Drucker, 1986, p. 27). Drucker does not speak about profit maximization. For him profit is a precondition but not the only target of business: “How much profitability do we need? To attain any of the objectives entails high risks. It requires effort, and that means cost. Profit is, therefore, needed to pay for attainment of the objectives of the business. Profit is a condition of survival. It is the cost of the future, the cost of staying in business.” (Drucker, 1986, p. 84).

McIntosh et. al (2003), in their excellent book “Living Corporate Citizenship”, are totally in harmony with the above cited standpoint of Drucker. McIntosh states that the gap between business and politics is decreasing and that society is increasingly tending to impeach the business community for interfering with political decisions or at least trying to pressure national governments through business leaders.

*The answer to our first question (Q1) is that it is not enough to limit the focus on the classical business targets like profit and growth, as well as the preconditions to achieve those targets. Responsible management should be integrated into business and into management education.*

## **2.2. RESPONSIBLE MANAGEMENT EDUCATION IN A REGION WITHOUT HEADQUARTERS OR A STRONG SME SECTOR**

The ideas of Drucker and McIntosh are very appropriate to the CEE region, but there are two **additional structural (less technical) burdens**. One is that the very fast process of privatisation (especially in Hungary, Slovakia and the Czech Republic) led to the CEE region becoming ‘the

region without headquarters, the region of subsidiaries.' This has a lot of consequences regarding the focus of "Responsible management". One example is the story of Electrolux in Hungary.

One example is the story of an household appliances manufacturer in Hungary. The predecessor of the company, besides offering to its employees use of a health care centre, also owned a kindergarten, a botanical garden, a zoo, and even an ice hockey stadium. The company was not only the biggest employer in the region but provided most welfare types of services in the small town it operated in (Wetzker, et al., 2006). "What happens when small iconic socially oriented businesses are acquired by large corporations?" This question was asked and answered by James Austin (2008, p.77): "Such mergers create significant opportunities for creating both business value and substantially expanded social value, but they also pose unusually difficult challenges because the merging entities are often strikingly different in philosophy and operating styles as well as in scale".

This has happened in the former soviet dominated CEE countries where corporations were more social employers than business corporations. The well-known subject of intercultural management had no parallel to the complexity of the transition of the corporate culture of those firms.

The other barrier is that the SME sector was nearly absent from these economies, while world-wide opinion about SMEs is that they are socially more responsible than rootless multinational corporations (Lepoutre and Heene, 2006, p. 257). The corporate culture of SMEs in CEE countries is still in its infancy so their more stable ethical foundation is also absent. They tend to have closer relationships with the public but their social activity is still very weak; they are not yet able to create trust in the business community.

Regional aspects of the economy, regulations and sustainability definitely influence higher education. Holm et al. (2014) compare the patterns of education for sustainability at universities of China and the Nordic countries, stressing the importance of country-specific regulations and attitudes towards sustainable development. For Central and Eastern Europe, Adomšent et al. (2014) provides an overview about management education for sustainable development, assessing the role of geographical, political and cultural patterns in the education of the analyzed countries and regions. A Polish perspective is provided by Kościelniak (2014), the Serbian situation is discussed by Milutinović and Nikolić (2014), and the Hungarian perspective provided by Marjainé Szerényi Zsuzsanna - Zsóka Ágnes - Széchy Anna Zsófia -Kocsis Tamás (2011)

The conclusion from those papers is that it is hard to put RME onto the agendas of universities in general, but the task is even more challenging for the CEE region.

### **2.3. ACADEMIC RIGOR VERSUS RELEVANCE FOR EVERYDAY MANAGEMENT**

Presenting the soft side of management– which is not very rational and includes concepts like intuition, creativity and empathy – does not always imply being very 'scientific' or 'academic'. From Francis Bacon until modern times (just to mention some names: Richard Feynman, Thomas S. Kuhn, Karl Popper, Lisa Randall), there has always been a diversity of opinions about science. What is common in them is the view that (1) the results of science are objective and don't depend on the subjective view of the researcher; (2) the results can be generalized; and (3) if experiments are reproduced the outcome will be the same.

The concepts of Strategic Thinking and RME may not fit the impressive description of science provided by one of the most famous living scientists, Lisa Randall: "The beauty of science – in

the long run – is its lack of subjectivity”, and “Science seeks objective and verifiable truth about the world” (Randall, 2013, p. 212). On the other hand, Mintzberg (2009) observed that strategic thinking requires creativity and synthesis and this is better served by intuition than through rational analytical work.

Regarding Corporate Strategy, Sustainability, or Responsible Management (RM) – which are complex, uncertain, risky, often not transparent areas and use various evaluation criteria based on different interests – it is a fact that none of the above three conditions of science are valid when applied to standard courses about Sustainability, CSR and RM. Most corporate decisions are subjective, “unscientific”. Beyond this “unscientific” nature of the field of study, there is one additional problem: the contradictory nature of business education. The so-called “two cultures” problem which tends to overrule the debate at business schools is well described by Datar et al. (2010), indicating that business school culture is more concerned with *rigor* while business culture rather expects *relevance*. “Two cultures, each with its own agenda, norms, and frames of reference, struggles for control: the soldiers of organizational performance and the priest of research purity. What topics should be the focus of teaching and research? Should the curriculum feature analytical tools or managerial problems? Should the emphasis be on the rigor or relevance? Eventually, rigor won” (Datar et al., 2010, p. 76). “Because business schools are increasingly modelled on academic disciplines, business school research is seen as having only limited impact on managers and the problems they face ... Business school appeal to one another as scholarly communities through a plethora of academic journals that are utterly divorced from the challenges of everyday management” (Datar, et al., 2010, p. 77).

Certainly, there exist serious intentions to solve the conflict between business theory and practice. A very promising approach is the so-called development (or design) research, described succinctly by van den Akker and Nieveen (1999, p. 8-9) :

*“More than most other research approaches, development [design] research aims at making both practical and scientific contributions. In the search for innovative ‘solutions’ for educational problems, interaction with practitioners... is essential. The ultimate aim is not to test whether theory, when applied to practice, is a good predictor of events.”*

Reeves (2005) supports the benefits of design research and recommends it in his paper “as a particularly appropriate approach to socially responsible inquiry” (Reeves, et al., 2005, p. 97).

Our perspective is perfectly reflected by Rumelt, one of the most influential authors of strategic management today: “To generate a strategy, one must put aside the comfort and security of pure deduction and launch into the murkier waters of induction, analogy, judgment and insight” (Rumelt, 2012, p. 245). So, the aim is to deal with the challenges of everyday management. Part of this is the management responsibility.

### **3. DISCUSSION ON RESPONSIBLE MANAGEMENT EDUCATION (RME)**

At the end of the nineteenth century when the famous Chicago University was established, Rockefeller cared so much about the chapel (today Rockefeller Memorial Chapel) because he was deeply interested in promoting Christian values in Chicago. Rockefeller explicitly stated that “the spirit of religion should penetrate and control the university” (cited by Goodspeed, 1972, p. 292-293). One hundred years later, at the same university, the famous professor Mearsheimer in his inauguration speech stated that “over the course of the twentieth century, the effort to develop a scientific morality

failed almost completely. Today, elite universities operate on the belief that there is a clear separation between intellectual and moral purpose, and they pursue the former while largely ignoring the latter. There is no question that the University of Chicago makes hardly any effort to provide you with moral guidance. Moreover, I would bet that you will take few classes here at Chicago where you discuss ethics or morality in any detail, mainly because those kinds of courses do not exist” (Mearsheimer, 2001). It is probably the 2008 economic crisis (or perhaps the additional one billion in population growth) that stimulated the writing of a recent publication by elite business school leaders containing statements which are totally different from mainstream ideas. According to Muff (Muff, et al., 2013) the real question is “*What kind of world do I want to create? An increasing number of companies and even business schools saw themselves as being stakeholders in the creation of a very different kind of world, a sustainable world where people lived well. All of them.*” (Muff, et al., 2013, Preamble, xiii)

In continental Europe the development path is slightly different. Leading business schools like the Rotterdam School of Management established a Business-Society Management Department 1999 which in 2006 had 25 staff members (Kaptein and Yip, 2011). At the predecessor of Corvinus University, the Department of Environmental Economics and Technology was established in 1989 and the Business Ethics Centre in 1995. Beyond those promising signs, our own experience supports the evaluation of Rasche and Gilbert: “in most schools ethics education remains restricted in terms of the actual number of students who are exposed to such topics. This raises the question of whether ethics related discussions might not suffer from the problem of “preaching to the converted” (Rasche & Gilbert, 2012, p.4).

The Six Principles for Responsible Management Education (PRME) were unveiled at the 2007 Global Compact Leaders’ Summit, at the Palace of Nations in Geneva. Although those principles are very general, they undoubtedly point in the right direction. The call for the incorporation of universal values in curricula and research is honourable and needs to be realized. For making use of PRME see also Godemann et al. (2014).

If we state that more responsibility should be part of management education the question automatically arises if this should happen as integrated part of other business courses or there should be special courses focusing on RME. Would it not make more sense to improve (methodologically and content-wise) existing courses and path? Are there any advantages of adding a new RME course to our already full agenda? The answer is not evident. There are significant Pro’s and Con’s regarding the education for responsible management which are discussed in the following.

### **3.1. CONS: SEVEN SCEPTICAL REMARKS ABOUT RESPONSIBLE MANAGEMENT EDUCATION**

(1) A call for responsible education dates back to 200 years ago when the German Polymath Wilhelm von Humboldt wrote the following in his “Preliminary Thoughts on the Plan for the Establishment of the Municipal School System in Lithuania: “All schools ... that are recognized as such, not by a single social group, but by the entire nation or the state, must aim only at the general development of the human being. Whatever is required for the necessities of life or for one of its particular occupations, must be separated out and acquired only after general education has been completed. Whenever these two are mixed together, development becomes flawed, and the result is neither complete human beings, nor full citizens of particular social classes” (cited by Wertz, 1996, p.5).

Somewhat paraphrased, this indicates that we are seeking something like old wine in a new bottle. Not only is RME an old idea but it looks rather like simple common sense. Who would

deny that Management education should “enable effective learning experiences for responsible leadership” (see PRME Principle 3), or that we should “develop capabilities of students to be future generators of sustainable value for business and society at large”? (see PRME Principle 1).

The slogan ‘Responsible Management Education’ is neither creative nor novel. What critical is how the term is interpreted and implemented.

(2) After having taught the subject for many years we are still not sure if the course “Corporate Social Responsibility (CSR)” actually makes sense. To come into class with a lot of definitions taken from authorities and organizations about the content and the framework of CSR is not worth doing. It can even destroy the interest of students in this topic. But to go further, it also requires a lot of effort. Without company visits, guest speakers and case studies the concept of CSR is not very rich or convincing.

A question arises about the ‘payback’ of these efforts. Identifying a lot of interesting individual cases doesn’t solve the overall problem of the lack of consistency of the concept. We once had a guest speaker – head of the sustainability and CSR department of a huge 150 bn Euro sales company – ‘mentioning’ that after an “euphoric” start they closed the CSR department because to engage in CSR in parallel to regular business operations didn’t work. How do we explain this? How can we explain that another huge company just opened a “sustainability department”? Are we able to provide the ideal design for this? We are not. Our colleagues may look down on this subject which to them seems a lot more like a religion than a serious academic topic. Sometimes we also have the feeling that we are stuck somewhere in the middle of left and right brain concepts; rational and emotional arguments. And now we are dealing with a new slogan – Responsible Management Education – although the old one (Corporate Social Responsibility) is still not convincing, either content wise or methodologically.

(3) There is another weak point. We try to make inferences based on the past about the future. We use case studies as the universal weapon for coming to conclusions about potential management approaches. With the illusion that we have understood the past we feed the illusion that we can predict and control the future (Kahneman, 2011). By establishing the concept of “RME” we do not solve these problems. Most likely we deepen them, because we use examples of “responsible managers” instead of giving a clear (deductive) picture of them.

(4) Does adding the attribute “responsible” to management education really help? We don’t speak about “Responsible Physics” or “Responsible Medicine”, so why “Responsible Management”? With Physics and Medicine we generally do not question that they are “responsible” so why is the case different with Management? Would not courses on ethics, Kant and Plato much better cover the issue? Why should we have to add the disclaimer “responsible” just to the management education? How do we explain this? Are we creating a new buzzword just so we can establish a new chair at the university?

(5) An interesting and demanding, but nevertheless contradictory concern with Responsible Management Education is that the concept of “Responsibility” is very fuzzy. Responsible *to whom*, responsible *for what*? To define “the creation of sustainable social, environmental and economic value” as one of the principles of RME is easy<sup>3</sup>; to enact this principle without harming interests is impossible. How can one optimize the CO<sub>2</sub> burden of a coal-fired power station? What is the priority:

---

<sup>3</sup> See the Six principles for Responsible Management Education.

the social, the environmental or the economic dimension? Very simply: the ‘social’ responsibility would refer to maintenance of well-paid jobs, the ‘environmental’ responsibility should be to avoid CO2 emissions completely, and the ‘economic’ responsibility involves creating value for shareholders. This reminds one of a football match: is the best defender a nice guy or a ferocious fighter? Or should he be both? Smith, Marx, Friedman, Stieglitz and Hayek? If we read all of them we will end up confused. If we always try to be “Responsible” most likely we will end up confused as well.

(6) What makes the task still more difficult is that it is much easier to teach and to learn about a defined, restricted topic than it is about a whole foggy field of topics. It is a relatively easy job to teach statistics or accounting but more difficult to teach strategic thinking, design, ethics or even to establish the course RME. This is very difficult – especially if we are not happy with discussing categories and using bench marks. Are we ready to do this or do we underestimate the effort needed to teach RME?

(7) Last but not least: we know that teaching is only one – albeit very important – molecule in the ocean of influence on people’s culture and behaviour. As Lao-Tzu said 2500 years ago, “what can be taught does not have to be learnt”. This gives the message that our experiences are in charge of changing our minds, much less teachers. Will we now try to add a new “foggy field” of education, Responsible Management Education, to stressed teachers’ workloads? Perhaps it would be better if this time and effort were used by sending students to companies to gain experience, and to understand that RME is not a one-dimensional, transparent topic.

The above points represent the sceptical dimension of the authors’ perspective. The basic message is that we may be trying to shoulder in a different concept, direction and slogan to existing syllabi; one which is not only very difficult to incorporate but also happens to be a burden on pre-existing – already imperfect – courses.

### 3.2. PROS: SIX CONSTRUCTIVE REMARKS ABOUT RESPONSIBLE MANAGEMENT EDUCATION

Which changes do we see as necessary for management education? Why should management education become more responsible? What may be the positive side of introducing RME?

(1) The modern environment awareness which exists today has emerged basically over the last 50 years. Today it is a powerful force. The same is true for compliance. Twenty years ago, the CEO – “with his two E’s: “egocentrism + the empathy gap” (Murnighan, 2012) – could decide alone about almost everything, including ‘sensitive bonuses’ for business partners. Today, compliance draws lines for the CEOs (a lot of whom still have the same two E’s) that they take very seriously.

Why should responsible management in 2050 not be a similar standard as Compliance today, which is more attractive to students than today’s courses on financial tools or corporate development?

“As Steve Jobs says, there is an element of “trust” here: a faith that no social-scientific study can turn into a certainty. The situation can be likened to Pascal’s wager. What do we stand to lose in the future if we do not bet on the student’s versatility? Mounting pessimism toward liberal education could exacerbate our economic woes. There is a glaring risk that vocational education will not prepare young people to lift the country out of recession.” (Isaacson, 2011)

(2) Aiming for “Responsible business education “opens the door to incorporating into management education more arts, more neuroscience, more psychology, ethics, philosophy and more

physics. This is the route to better understanding our global environment. It is also the way to develop beyond the fallacious perspective of “homo economicus”.

(3) In a changing learning environment over the coming years we will have to spend more time developing teaching methods than developing content. There are three well-known arguments which support this proposition:

(3/1) **“e-society” is changing our behaviour.** It is affecting our willingness to learn facts, our inclination to read books and it is changing how we deal with time-intensive tasks. On the other hand, the open door to the digital world gives us access to an immense amount of information. The e-society requires us to rethink our way of teaching because it creates a new kind of student and permanently changes the quality of information they have access to. How can we teach in a world where a lack of access to information is no longer an issue and few methods exist to deal with this situation? How can we pique the curiosity of students who are used to assuming they can rely solely on Google and on social networks for information? RME could be the pacemaker in this area.

(3/2) The **expectations and demands of well-educated students** are changing. The value of soft skills is increasing while the value of lexicographic knowledge is decreasing. Use of the right hemisphere of the brain is increasing (intuition, empathy, creativity) while the left one is losing its dominance (rationality, logic, language-based understanding). Design, convincing communication, creativity, empathy and social behaviour are attributes that employers are looking for. But how can we teach students to master these things? Also here RME is predestined to support this demand. In our faculty we have been positively surprised how many students have been interested in facultative responsible management -related courses.

(3/3) Planet Earth has become a global village. Everything is interconnected. **Complexity and uncertainty** dictate business. These things cannot be described accurately with simple, deterministic tools. ‘Inductive’, ‘intuitive’ and ‘subjective’ have become key words, instead of the traditionally used ‘deductive’, ‘rational’ and ‘objective’. Indistinct experience instead of clear logic! How can we reflect this in our business teaching? RME is an area where this “tradition” never worked.

It is doubtful if humanity has ever been under such pressure to adapt to this magnitude of changes in education. Thanks to Socrates, Maria Montessori, Locke, Rousseau, Wilhelm von Humboldt and other giants, educational methods have undergone significant changes in the past. What is upon us today, however, requires more than change; it requires complete transformation. To connect these necessary changes with more responsibility (RME) could be advantageous.

(4) We mentioned above that CSR and RME are very fuzzy ‘soft’ courses. They are neither deterministic nor objective and thus give a lot of freedom to the educator and also to students. This freedom has to be used to provoke doubt and raise questions. We actually do live with a great deal of uncertainty, so we ought to admit it. To be uncertain means to doubt. Feynman stated *“I think it is much more interesting to live with not knowing than to have answers which might be wrong”* (Feynman, 2005, p.5). A student should never be certain. Unfortunately, too many students are searching for certainty. Doubt is more important than knowledge. Dealing with RME supports the acceptance of doubt.

(5) Encouraging RME provides the opportunity to broaden the views of teachers and students. It evokes big questions which are not part of regular courses. We are thinking here of objective processes and phenomena such as entropy, which begun with the “Big Bang”, and the fact that we also have to deal with entropy in business. We are thinking about the fact that the potential of the Earth is limited and there are limits to globalization and complexity. What are the consequences of

the trend towards social differentiation? – and other such ‘big’ questions. Beautiful messages such as ‘the world is so wonderful in the sense that the stars are made of the same atoms as cows, as us and as stones’ (Feynman, 2005) could become part of management education.

(6) Jack Welch – the “Manager of the last Century” – becomes older and wiser. Finally, he came to the conclusion that his conviction regarding shareholder value was not suitable for strategy-setting. “On the face of it, shareholder value is the dumbest idea in the world” (cited by Guerrero, 2012). Employees, customers and products are important. Most CEOs are not so flexible and open to changing their minds. All said it makes a lot of sense to confront young people with sensitive questions. This is one conclusion that the economic crisis has bought home to us; we cannot start early enough highlighting problems with society in general and with management specifically. As teachers this is our responsibility.

This opinion is supported by Porter and the Harvard Business School: “Most of what constitutes CSR or corporate philanthropy today is about doling out money to those who don’t like you, about establishing relations with those who don’t like you... We need to move away from these defensive strategies and start thinking in terms of efficiency and value creation. There is no inherent conflict between social and economic objectives, both can contribute to improved competitive advantage” (cited by Højensgård & Wahlberg, 2004, p.52) – and later: “The most important thing a corporation can do for society, and for any community, is to contribute to a prosperous economy... CSR will become increasingly important to competitive success (Porter & Kramer 2006, p.19).

The above listed solid pro and contra arguments show that on one hand we can be sceptical about RME, but on the other hand, there are also reasons to be positive. Rationally, we have to accept that the Cons are strong because they are concrete and it is difficult to find arguments against them. But based on our intuition<sup>4</sup>, we prefer the latter, more positive approach. Perhaps less of the term ‘RME’ but more of the implementation of this approach is urgently necessary. To say CSR or RME or anything else is secondary. To deal more with ethical issues, with sustainability, with social responsibility instead of figures and case studies makes a lot of sense. We feel that the profiles of Business Schools should move in a less technical, mathematical, monetarist direction. The crisis we have had since 2008 reflects a crisis of Western culture in general and of Western education specifically. Business Schools see themselves as flagships of this education. As such, their teaching – both content wise and methodologically – contributed to the crisis. Changes are indeed necessary. We think that RME – although it is still “immature” – could contribute to such changes. But we also think that if we don’t find the right way to teach it, then it could become more harmful than useful.

---

<sup>4</sup> It is still unusual to use the intuition as a decision criterion. We think this is an anachronism. Three arguments for this are the following: (i) Leading people from business and science (Steve Jobs, Jack Welch, Albert Einstein, Mintzberg, Kahnemann, Csikszentmihályi) have accepted that intuition is the most important way of understanding.

(ii) At least 50% of strategic decisions are based on intuition and not on rational decision-making.

(iii) We asked more than 150 M.B.A. and Executive M.B.A students (hailing from more than ten countries) if they agree with Plato’s statement that “the absolute rational world is the perfect world”. A large majority of students (95%) answered ‘No’.

Finally there is a very important open question to the concept of Responsible Management Education: how should it be embedded into management education? The two alternatives are:

- either running dedicated courses on Responsible Management, CSR and Sustainability; or
- incorporate RME-related content into every Management course.

The first alternative is not perfect; it is rather like speaking about the landmasses which are located on a small island. The second is very demanding and appears unrealistic. We would be happy if RME became in the long run part of every business course from finance to information technology. In this case, a specific course would become redundant. In the short run we need to establish the pillars for the penetration of RM into other courses and reflect the expectations of the students.

*The answer to our second question (Q2) is that Responsible Management should be an important part of business education and, ideally – at least in the short term – be run as a specific independent course.*

#### 4. METHODOLOGICAL REMARKS ABOUT RESPONSIBLE MANAGEMENT EDUCATION

We have international accreditation for our Business School and our Master courses are part of the well-recognized CEMS program. To achieve these results we have had to deliver a lot of information about our syllabi, about the structure of our classes, about the careers of our students, and so on. Improving our way of teaching has been relatively secondary. We think this is problematic because – as mentioned above – education is undergoing a transformational process, especially regarding teaching methods. There are a lot of elegant descriptors of courses but much less intelligent input on how to make these headlines lively. Below we try to give some ideas for Responsible Management Education. Based on our experience, at least five basic teaching approaches can be identified:

- **A deductive approach:** Start with a general picture, with axioms and hypotheses, and try, based on these, to come to concrete conclusions about a given situation.
- **An inductive approach:** Analyze a lot of examples (to give sustainability-themed examples, Exxon Valdez, Chernobyl, the London Smog of 1952, the Aral Lake) and create case studies and generalize experience from these examples. Deal with single technical issues, like greenhouse gases, waste management or the rain forest.
- **A definition-driven, “lexicographical” approach:** Try to give a comprehensive overview about existing opinions and definitions.
- **A tools-driven analytical approach:** Focus on analytical tools and apply them.
- **An illustrative and well-structured approach:** Try to find a simple but convincing and intellectually challenging structure for the topic. Fill this structure with parables and tales. Use illustrations, images and metaphors. Stay focused. Don't try to give a broad overview.

The question arises: which of these approaches is best placed comprehensive to reflect the needs of Responsible Management Education?

If we take the existence of the three drivers we mentioned before – e-society, demand for right brain skills and complexity/uncertainty – seriously, then inductive, definition-driven and tools-driven analytical teaching approaches seem to be of questionable utility. They don't ac-

count for the fact that not only do we have a brain between our ears but there is also a second brain on the desk in front of us: a computer. To employ these pedagogical approaches risks trying to replace the computer instead of leveraging it.

The deductive approach always makes sense and in most cases it is the best choice. But unfortunately, in social sciences (such as in Responsible Management) it does not exist. There are no hypotheses which one can prove in a scientific way.

Therefore we tend to prefer the fifth approach: **be illustrative and build on simple and clear structures**. The challenge is to identify such structures, and to be illustrative without becoming irrelevant.

Let us demonstrate our approach – simple, well-structured and illustrative – by using the environmental aspect of sustainability as an example for RME. There are also other potential areas – like supply and demand chain ethics and internal social relations (which include a lot of sub topics like compliance, transparency, risk management, target setting, product quality and potential damage to the customer, process management and safety) – but it makes sense to be focused. The chosen topic – the environmental component of sustainability – is part of Responsible Management and it is close to the heart of many students as it addresses their futures.

#### 4.1. First step: Simplifying the problem

What does “Sustainability” actually mean? Sustainability is a buzzword. The expression sees a lot of use in the media, at universities and in business presentations. Most often, sustainability relates to environmental issues but it is occasionally used in the wider sense of the word. There must be thousands of definitions of sustainability but does teaching them really help? Many authors remark that due to the plethora of definitions the word ‘sustainability’ has lost its value and has become a catchall phrase. Let us try to move away from this phrase towards a subject which makes students curious and challenges them.

Our understanding of “sustainability” is simple and based on two sources. These include the most-commonly cited one, devised a quarter of a century ago by Brundtland (Brundtland, 1987), and the oldest, dating back 250 years, coined by a forest officer hailing from Saxony named Hans Carl von Carlowitz (Grober, 1999). The Brundtland report defined sustainability as being economic and social behaviour that does not damage future opportunities, and does not negatively impact the life of our children – a clear and simple statement. Carlowitz, meanwhile, was dismayed by the rapidly declining number of trees in the forests of Saxony which were being extensively logged at the time, primarily for firewood, as well as for use in mining, construction, and metallurgy. He appealed to King August of Saxony and asked that an order be given out that for every tree that was cut down; a new one should be planted, so the number of trees would be “sustained”. The King favoured his idea (von Carlowitz, 1713).

We are of the opinion that teaching “sustainability” should be done through employing such simple definitions. For us, “Sustainability” simply means avoiding negative impacts on our future.

#### 4.2. SECOND STEP: STRUCTURING COMPLEXITY

This is a challenging endeavour. The best way is to spend more time than is usually allotted on structuring, beginning by seriously contemplating the problem at hand, with patience. The most convincing examples of the use of memorable structures to describe complex problems are the achievements of Linnaeus in Biology, Kekule and Mendeleyev in Chemistry and Bohr in Physics. These are examples so surprisingly simple that they are not easily forgotten. In management educa-

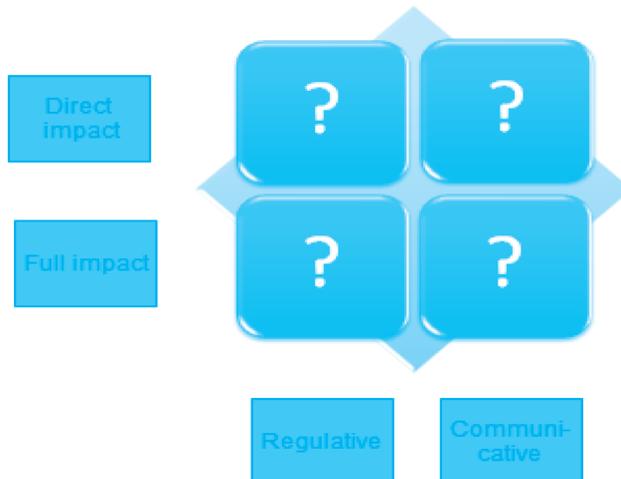
tion the best examples of clear structures for deeper understanding are the ‘Five forces’ of Michael Porter (Porter, 1990, Kramer & Porter, 2006, p.8), SWOT and the ‘Growth-share Matrix’ of the Boston Consulting Group (Stalk & Hout, 1990 p.15). All three tools have been substantially criticized but they demonstrate a smart simplicity that is fascinating and provokes meditation on the topic. The dream of every teacher: Students start to meditate and to become curious!

What is the best and most memorable way of structuring ‘sustainability’? We have undertaken intensive brain storming with students about this. A lot of potential criteria for structuring ecological issues came to the table: regional issues, technical dimensions, type of damages, pollutants, degree of risk, time horizons, etc.

We came, after intensive debate, to the conclusion that our key structural criteria should be the cause of the ecological problem (**causality**) and ways to manage the problem (**change**). These two important dimensions open up different pathways. For the dimension of **causality** the question arises whether we should discuss only **direct causes** with direct environmental impacts (e.g. the CO<sub>2</sub> emissions of coal fired power plants) or **indirect causes** with full environmental impact (the ‘carbon footprint’ of a beef steak). For the dimension of **change**: What are the levers for improving sustainability – regulatory measures (regulative), or convincing arguments – including RME – in favour of certain paths of action (communicative)?

#### 4.3. THIRD STEP: BECOMING ILLUSTRATIVE

This involves use of a visual component to increase transparency. Pictures say more than words and should be employed if possible. The split between causality and change in further two dimensions (full/direct and regulative/communicative) can be easily incorporated into a portfolio matrix that allows for easy visualization. Such illustrations are ideal for displaying arguments with clarity.



The approach is shown in Figure 1. Question marks indicate which parts need to be filled with content to make the illustration lively.

#### 4.4. FOURTH STEP: FILLING THE STRUCTURE WITH CONTENT

We need a “philosophy”, an explanation and a story-line for every quadrant in our portfolio matrix. Without completeness we provide some ideas:

- (a) **The dimension of change** – a comparison of regulative with communicative methods – brings up a basic question. Smith or Kant? The great Adam Smith, writing about the modern market economy, postulated the existence of an invisible hand which would collaborate in providing all the regulation needed. This invisible hand depends on the rules which concern the governing of competition, prevention of criminal activities, determination of risks, collection of taxes – and protection of the environment for the future. Mankind – as Adam Smith and Charles Darwin pointed out – tends to favour immediate and individual goals over long term goals, so it becomes necessary to vigorously restrict certain individual activities using regulatory mechanisms. The equally great Immanuel Kant shows no inclination to regulate the selfish, but appeals to reason. Like Socrates, Plato and others that came before him he argues that rationality and insight will lead us to make the best decisions. Smith versus Kant: when do we regulate, when do we try to convince? Even this first discussion of the two dimensions (regulation vs. communication) leads to many opportunities to pique students’ curiosity and spur them to investigate classical philosophical and ethical questions, to visit Google and to look for ideas and potential solutions to problems. Similar inspiration can be found for another dimension of our structure.
- (b) **The plane of causality** leads us to address direct impact vs. full life cycle impact on environmental sustainability. Full impact means that everything leads to the consumption of resources. Sustainability can thus retroactively be interpreted by using the end product as a starting point. Tropical rain forests are cut down to clear land for subsistence farming and commercial agriculture; man-made carbon dioxide can theoretically be tracked to a single source for any consumer product. In environmental studies there are two well-known ways of dealing with direct and full life cycle impacts: input-output-analysis and the ecological footprint (Csutora, 2012, Csutora and Zsóka, 2011). Determining the footprint is not as elegant as using the Input-Output-Matrix developed by Leontief (Leontief, 1966) but it is transparent and illustrative. Google delivers a lot of interpretations, benchmarks and comparisons of footprints and students can leverage their creativity and inspiration to come to their individual results<sup>5</sup>. The authors simulated a small calculation by inverting a 3 x 3 matrix with three dimensions: coal, electricity and CO<sub>2</sub>. The result was obvious: it is easier (‘cheaper’) to save CO<sub>2</sub> by limiting the electricity consumption of households than to directly save CO<sub>2</sub> in the coal-based electricity generation process. Students were not only surprised by this fact, but – which is even more important – they wanted to know more about “Responsibility” for full and direct effects.
- (c) **We can combine the communicative and the causal sides**, reflecting and discussing quadrants of the portfolio matrix. Now we take an example, the **full impact approach of sustainability and its promotion by using communicative methods** (the quadrant below on the right side). This is an ideal topic for an educator and allows them to combine ‘practical’ questions with a high level

<sup>5</sup> It is difficult to say if this is good or not, but it is a fact that out of more than 150 Students only 38% were aware of the size of their own footprints (from a sample of more than 150 students from Master classes and executive MBA courses at the Corvinus University of Budapest).

discussion of ethics. The difficulty of grasping how communication could work to promote full sustainability can be attributed to the indirect causes of environmental impact and poorly-defined levers of change. On the one hand, it can be seen as an ‘ideal sustainability’ approach: communication leads to contemplation of the consequences of actions and to conviction and the drive to consider and deal with environmental impacts. Conscientiously avoiding purchasing furniture made from tropical wood, consideration of the CO<sub>2</sub> footprint of a steak dinner, of limits to fossil fuel resources before taking the car, or of the environmental impacts of fabric production prior to buying clothes. Not because prices dictate behaviour, but simply based on the desire to make better choices. This approach is a wonderful way to instigate wide-ranging discussion with students – from Plato to Daniel Kahneman, Adam Smith to Hayek, pros and cons.

#### 4.5. FIFTH STEP: ASSEMBLING THE PICTURE

What conclusions can be drawn? How can Responsible Management Education be supported methodologically? Will the notion of ‘personal responsibility’ define the next century or will it be rather ‘perfect regulation’? This has been the most intensively discussed topic. Similarly, we could ask will “Responsible Management” or externally driven “Detailed Compliance” define the next decades? The modern age does not limit access to information and a lack of it will not be a defining factor. It is likely that we will experience both approaches, but it is worthwhile spending time deliberating their weight and impact. As mentioned, as educators we decided to employ a well-structured and focused approach. We believe that structure is more important than facts and figures. A well-structured approach is also the best way to get to the core of such a complex problem as “Responsible Management”. It is interesting to note that some students were not very keen on a well-structured approach and were mainly interested in inspiring examples. This approach is not always easy to comprehend and requires the ability to reflect and deliberate for an extended period of time. We link our well-structured approach to open book exams – without exception, although a significant number of students prefer the closed book form on the grounds that this approach offers more protection from surprises and does not necessitate as much creativity.

*The answer to our third question (Q3) is that the appropriate way to teach such a soft and nebulous topic like Responsible Management has to be well structured, illustrative, simple and transparent. To be simple is always difficult, but we should invest time and energy, because the probability that our students become interested and curious is high.*

### 5. SUMMARY

The paper articulates the viewpoint of the authors regarding the integration of Responsible Management Education into the course structure of today’s business school education. The ultimate goal is to educate responsible managers, however, contemporary approaches, course structure and teaching methods – in many cases – seem to fail successfully supporting this goal. Based on several input from the literature, our experience in teaching and business consulting, we argue that RME could become an important means for avoiding an increasing number of unmanageable economic situations. The relevance and applicability of the concept is discussed by explaining the contra and pro arguments for Responsible Management Education.

The contra arguments mainly refer to the real content and application of the concept of responsible management education, as well as to the questionable influence of RME on students’

behaviour. The constructive remarks stress the integration of holistic approaches and interdisciplinary views into management education, the importance of novel teaching environment and adaptation to new challenges both in education and in management practice.

Beyond sceptical and positive remarks regarding the term, the appropriate methodology of teaching RME is also a key issue. We state that it is not the right way to just supplement the previous syllabi with new elements; the whole previous approach should be questioned and restructured. We are clearly at the beginning of a transformational phase. A first step in this transformation could be to adapt the methodology of simplifying the problem, structuring complexity, becoming illustrative, filling the structure with content, and assembling the picture – as recommended in the paper.

## REFERENCES

- Adomßent, M., Fischer, D., Godemann J., Herzig, C., Otte, I., Rieckmann, M., Timm, J., 2014. Emerging areas in research on higher education for sustainable development e management education, sustainable consumption and perspectives from Central and Eastern Europe *Journal of Cleaner Production*, 62, 1-7.
- Austin, J., Leonard, H. B., 2008. Can the virtuous mouse and the wealthy elephant live happily ever after? *California Management Review*, 51(1), 77-102.
- Behnam, M., Rasche, A., 2008. Are Strategists from Mars and Ethicists from Venus? Strategizing as Ethical Reflection. *Journal of Business Ethics*.
- Brundtland, G. H., 1987. *Our Common Future*. Dordrecht, The Netherlands: Martinus Nijhoff Publishers.
- Clinton, O. L. &, Sonny, S., 2002. Creating competitive advantage through effective management education. *Journal of Management Development*, 640-654.
- Csutora, M., 2012. One More Awareness Gap? The Behaviour–Impact Gap Problem. *Journal of Consumer Policy, Consumer Issues in Law, Economics and Behavioral Sciences*, 1, 145-163.
- Csutora, M., Zsóka, A., 2011. Maximizing the Efficiency of Greenhouse Gas Related Consumer Policy. *Journal of Consumer Policy, Consumer Issues in Law, Economics and Behavioral Sciences*, 1, 67-90.
- Datar, S. M., Garvin, D. A., Cullen, P. G., 2010. *Rethinking the MBA, Business Education at a crossroad*. Boston, Massachusetts: Harvard Business Press.
- Drucker, P. F., 1986. *Management, Tasks, Responsibilities, Practices*. New York: Truman Talley Books / E.P. Dutton.
- Du, X., Su, L., Liu, J., 2013. Developing sustainability curricula using the PBL method in a Chinese context, *Journal of Cleaner Production*, 61, 80-88.
- Feynman, R. P., 2005. *The Meaning of It All: Thoughts of a Citizen-Scientist*. <http://openlibrary.org: Basic Books>
- Friedman, M., 1962. *Capitalism and Freedom*. Chicago: University of Chicago Press.
- Friedman, M., 1970. The Social Responsibility of Business is to Increase its Profits. *The New York Times Magazine*, 13 September, 32-33, 122-126.
- Godemann, J., Haertle, J., Herzig, C., Moon J., 2014. United Nations supported Principles for Responsible Management Education: purpose, progress and prospects, *Journal of Cleaner Production*, 62, 16-23.
- Goodspeed, T.W., 1972. *A History of the University of Chicago*. The University of Chicago Press.

- Gordon, R. A., Howell, J. E., 2010. Higher Education for Business. *www.tandfonline.com*, 30 July, 115-117.
- Grober, U., 1999. Der Erfinder der Nachhaltigkeit. *Die Zeit*, 25 November, 5.
- Guerrera, F., 2012. Welch condemns share price focus. *Financial Times*, 12.03.2012 <http://www.ft.com/intl/cms/s/0/294ff1f2-0f27-11de-ba10-0000779fd2ac.html#axzz3TK5O9YAB>
- Hesselbarth, C., Schaltegger, S., 2014. Educating change agents for sustainability – learnings from the first sustainability management master of business administration, *Journal of Cleaner Production*, 62, 24-36.
- Holm, T., Sammalisto, K., Vuorisalo, T., 2014. Education for sustainable development and quality assurance in universities in China and the Nordic countries: a comparative study, *Journal of Cleaner Production*, doi: 10.1016/j.jclepro.2014.01.074.
- Højensgård, N., Wahlberg, A., 2004. Making Stakeholder Engagement Work - Bridging the practice-theory gap with a boost from the European Business Campaign on CSR. In: *It simply works better! Campaign Report on European CSR Excellence 2003-2004*. Copenhagen: The Copenhagen Centre, <http://www.csrquest.net/uploadfiles/L8.pdf>, 50-55.
- Huisingh, D., 2006. Sustainability in higher education: what is happening? Editorial, *Journal of Cleaner Production* 14 (2006), p. 757-760
- Isaacson, W., 2011. *Steve Jobs*. München: C. Bertelsmann Verlag.
- Kahneman, D., 2011. *Thinking Fast and Slow*. London: Allen Lane.
- Kaptein, M., Yip, G. S., 2011. The future of Business School research: the need for dual research methodologies. In: Morsing M., Rovira, A. S. (Eds), *Business Schools and their Contribution to Society CEMS*. London: SAGE Publication Ltd, 114-124.
- Karnani, A., 2010. The Case Against Corporate Social Responsibility, *Wall Street Journal*, 23 August, <http://www.wsj.com/articles/SB10001424052748703338004575230112664504890>
- Kerekes, S., Wetzker, K., 2007. Keletre tart a "társadalmilag felelős vállalat" koncepció (The Concept of "Socially Responsible Company" is going Eastward), *Harvard Business Manager* 4., 37-47.
- Kościelniak, C., 2014. A consideration of the changing focus on the sustainable development in higher education in Poland, *Journal of Cleaner Production*, 62, 114-119.
- Kramer, M. R., Porter, M. E., 2006. Strategy and Society: The Link Between Competitive Advantage. *Harvard Business Review* | [hbr.org](http://hbr.org), 77-93.
- Leontief, W., 1966. *Input-Output Economics*. Oxford: Oxford University Press.
- Lozano, R., William Young, W., 2013. Assessing sustainability in university curricula: exploring the influence of student numbers and course credits, *Journal of Cleaner Production*, 49, 134-141.
- Lepoutre, J., Heene, A., 2006. Investigating the impact of Firm Size on Small Business Social Responsibility: A Critical Review. *Journal of Business Ethics*, 257-273.
- Lozano, R. Ceulemans, K. Seatter, C. S., 2014. Teaching Organisational Change Management for Sustainability: Designing and delivering a course at the University of Leeds to better prepare future sustainability change agents, *Journal of Cleaner Production* , doi: 10.1016/j.jclepro.2014.03.031.
- Marjainé Szerényi Zsuzsanna - Zsóka Ágnes - Széchy Anna Zsófia -Kocsis Tamás (2011): Impacts of environmental education on sustainable consumption and environmentally conscious lifestyle, Survey findings in Hungarian higher education and high schools. 10th European Sociological Association Conference: Social Relations in Turbulent Times. 2011.09.07-10, Genf/Svájc.
- Milutinović, S., Nikolić, V., 2014. Rethinking higher education for sustainable development in Serbia: an assessment of Copernicus charter principles in current higher education practices, *Journal of Cleaner Production*, 62, 107-113.

- McIntosh, M., Thomas, R., Leipziger, D. & Coleman, G., 2003. *Living Corporate Citizenship: Strategic Routes to Socially Responsible Business*. Bolton, Great Britain: Biddles Ltd, Guilford & King's Ltd.
- Mearsheimer, J. J., 2001. *The Aims of Education Address*, <http://www.ditext.com/mearsheimer/aimsofeducation.html>
- Mebratu, D., 1998. Sustainability and sustainable development: Historical and conceptual review. *Environmental Impact Assessment Review*, 18 (6), 493-520.
- Mintzberg, H., 2009. *Managing*. San Francisco: Berrett-Koehler Publishers.
- Muff, K., Dyllick T., Drewell M., North J., Shrivastava P., Haertle J., 2013. *Management Education for the World: A Vision for Business Schools Serving People and Planet*. Cheltenham UK: Edward Elgar Publishing.
- Murnighan, J. K., 2012. *Do nothing*. New York: Portfolio Penguin.
- O'Brien, W., Sarkis, J., 2014. The potential of community-based sustainability projects for deep learning initiatives, *Journal of Cleaner Production*, 62, 48-61.
- Porter, M., 1990. *The Competitive Advantage of Nations*. New York: The Free Press.
- Porter, M. E., Kramer, M. R., 2006. *Strategy and Society. The Link Between Competitive Advantage and Corporate Social Responsibility*. *Harvard Business Review*, December, 2-19.
- PRME. *The Six Principles for Responsible Management Education*, <http://www.unprme.org/about-prme/the-six-principles.php>
- Randall, L., 2013. *The Higgs Mechanism*, in: Brockmann (Ed.), *This explains everything: Deep, Beautiful, and Elegant Theories of How the World Works*. New York: Harper Collins books, 212-214
- Rasche, A., 2008. *The Principles for Responsible Management Education (PRME) - A call for action German Universities*. *Journal of Business Ethics*.
- Rasche, A., Gilbert, D. U., 2012. *Cross-disciplinary Ethics Education in MBA Programs: Rhetoric or Reality*. *AOMBestPaper\_2012*.
- Reeves, T. C., Herrington, J., Oliver, R., 2005. *Design Research: A Socially Responsible Approach to Instructional Technology Research in Higher Education*. *Journal of Computing in Higher Education*, 97-116.
- Rumelt, R. P., 2012. *Good Strategy – Bad Strategy*. London: Profile books.
- Schmidheiny, S., 1992. *Changing Course: A Global Business Perspective on Business*. Massachusetts: The MIT Press.
- Smith, A., 1776. *The Wealth of Nations*. London: W. Strahan and T. Cadell.
- Stalk, G., Hout, T. M., 1990. *Competing Against Time: How Time-Based Competition Is Reshaping the Global Market*. New York: Free Press.
- Steiner, G., Posch, A., 2006. Higher education for sustainability by means of transdisciplinary case studies: an innovative approach for solving complex, real world problems. *Journal of Cleaner Production* 14, 877-890.
- Tom, T., 2008. *Educating for sustainability: A double-edged sword?*. *International Journal of Innovation and Sustainable Development*, 453-465.
- Vicente-Molina M.A., Fernández-Sáinz, A., Izagirre-Olaizola, J., 2013. Environmental knowledge and other variables affecting pro-environmental behaviour: comparison of university students from emerging and advanced countries, *Journal of Cleaner Production*, 61, 130-138.

- van den Akker, N., Nieveen, 1999. Principles and methods of development research.. In: Design Methodology and developmental research in education and training. The Netherlands: Kluwer Academic Publisher, 1-14.
- von Carlowitz, H. C., 1713. Sylvicultura Oeconomica, oder Haußwirthliche Nachricht und Naturmäßige Anweisung zur Wilden Baum Zucht. Leipzig.
- von Humboldt, W., 1960. Rechenschaftsbericht an den König (1809), In: Flitner, A., Giel, K. (Eds.), Wilhelm von Humboldt. Werke in fünf Bänden. Darmstadt/Suttgart, Band IV. 218.
- Wertz, M., 1996. Education and character:the classical curriculum of Wilhelm von Humbolt. Fidelio, 1-15.
- Wetzker, K., Kerekes, S., Csutora, M., Szónyi, L., 2006. Electrolux Lehel – more than a profitable enterprise, Jászberény-Hungary: Electrolux Lehel.
- Zsóka, Á., Marjainé Szerényi Zs., Széchy A., Kocsis T., 2013. Greening due to environmental education? Environmental knowledge, attitudes, consumer behavior and everyday pro-environmental activities of Hungarian high school and university students, Journal of Cleaner Production, Vol. 48, 126-138.