



**Copenhagen
Business School**
HANDELSHØJSKOLEN

PRME Principles for Responsible
Management Education

23-24 November 2009, Copenhagen Business School

CONFERENCE REPORT

INTERNATIONAL CONFERENCE ON RESPONSIBLE MANAGEMENT EDUCATION:
SUSTAINABLE LEADERSHIP IN THE ERA OF CLIMATE CHANGE



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INTERNATIONAL CONFERENCE ON RESPONSIBLE MANAGEMENT EDUCATION: SUSTAINABLE LEADERSHIP IN THE ERA OF CLIMATE CHANGE -- CONFERENCE REPORT --

Executive Summary

Contributing to the UN Conference on Climate Change (COP15) on 7-18 December 2009 a tangible outcome of the 23-24 November conference was The Copenhagen Conference Declaration: A Call to Action for Management Education that sets out three focus areas for the role of business schools in relation to climate change:

1. Integrate Climate-related Topics into Management Education
2. Research the Role of Business in a Low Carbon Economy
3. Lead by Example

The ambition is to inspire all PRME signatories and beyond to focus on climate change and acknowledge it as one of the grand societal challenges that need to be addressed also by business schools.

The conference discussed how business schools can help solve the climate crisis through new educational approaches, sustainable leadership, innovative research models and new forms of partnerships. The various sessions resulted in the following headlines and outcomes:

1. **Business Demands for Climate Change Competencies**
-- 4 competencies were identified --
2. **The Role of Business Schools in Solving the Climate Challenge and New Approaches to Curriculum Change**
-- 4 Best Practices of Curriculum Change were identified --
3. **Student Demand for Climate Change in the Business School Curricula**
-- 4 wishes for Curriculum Change were identified --
4. **During four parallel research tracks the 4 Most Important Research Topics on climate change were identified**

The conference results are used by the "PRME Working Group on Climate Change" that was formally launched during the conference to produce a Practical Guide to Climate and Curriculum Change to be presented during summer 2010.

The Principles for Responsible Management Education

Principle 1: We will develop the capabilities of students to be future generators of sustainable value for business and society at large and to work for an inclusive and sustainable global economy.

Principle 2: We will incorporate into our academic activities and curricula the values of global social responsibility as portrayed in international initiatives such as the United Nations Global Compact.

Principle 3: We will create educational frameworks, materials, processes and environments that enable effective learning experiences for responsible leadership.

Principle 4: We will engage in conceptual and empirical research that advances our understanding about the role, dynamics, and impact of corporations in the creation of sustainable social, environmental and economic value.

Principle 5: We will interact with managers of business corporations to extend our knowledge of their challenges in meeting social and environmental responsibilities and to explore jointly effective approaches to meeting these challenges.

Principle 6: We will facilitate and support dialog and debate among educators, business, government, consumers, media, civil society organizations and other interested groups and stakeholders on critical issues related to global social responsibility and sustainability.

The Copenhagen Conference Declaration: A Call to Action for Management Education¹

Presented at the PRME/CBS International Conference on “Responsible Management Education: Sustainable Leadership in the Era of Climate Change”,
23-24 November 2009, Copenhagen Business School

Business schools around the world call upon political leaders to agree to an ambitious global climate treaty at COP15 in Copenhagen setting a tone of integration and effective cooperation with beneficial effects for the future of our interdependent world. As business schools we understand our vital role in shaping and disseminating the values and best practices that future business leaders need to transform a global climate framework into action. At the *PRME/CBS Conference* it was agreed that to effectively support an ambitious climate framework, business schools should:

1. Integrate Climate-related Topics into Management Education

To meet the climate challenges, citizens of the world will have to alter their behavior and the economic, social and political governance systems that support human civilization. Not only are changes needed in external systems, but also within corporations in their relations with suppliers, customers, competitors, media, civil society and governments. To deal effectively with the changes needed, management education needs to adapt existing knowledge to include issues of climate change and sustainability within core disciplines as part of the new business imperative. These issues need to be integrated not only into businesses and more technical analyses related to the natural environment, but into the very core of business strategy, and that integration needs to be reflected in business school curricula. The climate challenge is multi-disciplinary and our response must be based on multi-stakeholder dialogue on climate change among educators, students, and other stakeholders such as, but not limited to, governments, business practitioners, local and global communities and NGOs.

2. Research the Role of Business in a Low Carbon Economy

Companies must base their future decisions on solid research and analyses: a future low carbon and sustainable economy needs to be based on well-researched management practices. Researchers and scholars need to rethink the (often implicit) premises that traditional management models are based upon and create new models of management, economics, and business that are inherently sustainable, have low carbon footprints, encourage disclosure and transparency, and meet true social needs. Business schools should encourage and reward research and other forms of scholarship on issues of management and climate change, and support professional development, through professional associations, linkages to business initiatives, publication outlets, and on-going faculty development in these domains, along with encouraging students to incorporate climate change issues into their research.

3. Lead by Example

In order to inspire the way forward for future generations we will strive to fully incorporate issues of climate change and sustainability into our operations through green campus strategies. We will spread within the PRME community of academic institutions and beyond among local similarly-spirited communities the following good practices:

- Estimating and disclosing the carbon impact of our research and education activities
- Taking measures to reduce our carbon footprint, namely developing energy efficiency saving attitudes, promoting renewable energies and sustainable mobility. The aim should be to reduce our GHGs emissions at least by 40% by 2020, and to reach carbon neutrality by 2030
- Using carbon offsetting practices only where it has been found very difficult to reduce emissions

Climate action and low carbon innovation is part of the bigger sustainability agenda as advanced by the UN Global Compact, whose values inspired our Principles for Responsible Management Education (PRME). We understand that the preservation of the basis for human growth requires a simultaneous attention to the pivotal problem of climate change along with three related global risks: food crises, water sustainability and energy uncertainties. Business schools should commit to develop a new generation of leaders capable of understanding the interrelation between those global challenges and acting effectively with new approaches and the necessary skills and efficacy conducive to change. In order to stay in tune with the global development on these issues we consider this a living document that will be updated according to the evolution of the climate change issues and the PRME community.

¹ The views expressed in this Declaration have been informed by deliberations among all participants at the abovementioned conference. They do not necessarily reflect the views of all conference participants or the entire global PRME community.

DAY 1 OPENING COMMENT: “The Future Sustainable Leader – A Business School Student Perspective on Climate Change”

The conference was opened by Robert Strand and Laura Storm. Robert Strand is a PhD student at the Centre for Corporate Social Responsibility at Copenhagen Business School and currently the Net Impact fellow to Europe. Laura is a master student of social science at CBS but already has an impressive business CV. As Laura described, climate change represents one of the greatest challenges that current business school students face as future leaders. Business students, however clever they may think they are, will not solve the issue of climate change on their own.

And this goes for any of the countless, but currently unknown, challenges student are sure to face as future leaders. These kinds of challenges demand engagement across traditional boundaries and from all sectors. No government, civil society or business can solve this challenge alone, so there is an obvious call for leadership. Business schools can meet and support this call for leadership by encouraging business students who have the capacity, the curiosity, and the humility to seek out the responses to our world’s most pressing issues that cross traditional boundaries. The ongoing debate about how to “fix” business schools is an important one, and business schools most certainly have a responsibility to engage in this discussion and look within to consider what “needs” fixing and how exactly to go about “fixing” it.

Agree or disagree that business schools need “fixing”, the reality is that society demands that those of us in the business community- educators, researchers, practitioners, and students alike look at ourselves through a critical lens to ensure we have the best interests of society in mind, and not simply our own best interests.

But the responsibility for this is not on the business schools alone. The business students must embrace this call and work to enact change within the schools they attend. Business students must take ownership to push business schools to develop their capabilities to be future generators of sustainable value for business and society at large and to work for an inclusive and sustainable global economy.



Robert Strand and Laura Storm

ROUND TABLE: Business Demands for Climate Change Competencies

Introductory statement: Matthew Gitsham, Ashridge “CEO demand for management education around climate change and sustainability”

There is clearly a performance gap between what business schools provide and what senior executives demand in their companies. In fact, fewer than 8% of senior executives believe that climate change and broader sustainability knowledge and skills are being developed very effectively by their own organisations or business schools.

76% of senior executives say that it is important they have the knowledge and skills to respond to trends such as low carbon economy, resource scarcity or doing business in emerging markets. In words of Mr. Gitsham, “Companies’ need for developing leaders who can thrive in the transition to a low carbon economy requires more than just more ‘ethics’ and ‘values’ in the curriculum.”

But what type of skills and mindsets are required to meet this need? Some of the answers are provided through the aid of the 3C cluster model of qualities and skills required by senior leaders: Context, Complexity, and Connectedness.

To understand and respond to changes in the environment in a strategic way is a core necessity not only for business but also customers and governments. Survival and flexibility skills in environments of low certainty are likewise crucial. It is key learning to balance short and long term perspectives. Senior leaders also require that students have the ability to understand actors in the wider political landscape. They should be able to engage and build effective relationships with new kinds of external partners. But how to go about securing development of these skills? In words of Mr Gitshman the answer is real experiences: project and action based learning from others as well as mentoring should be vital for business students.



Matthew Gitsham

Mads Øvlisen, Board Member, UN Global Compact and former CEO, Novo Nordisk



Mads Øvlisen

When students have finished their business education they should not expect to have “the complete toolkit”. The world is changing and evolving continuously. Thus, it is essential for students to leave business schools with robust analytical methods. Other key aspect after finishing business schools education is having a clear understanding of the values of society as well as the political processes and differences in decision making in both, business and politics.

Students have to learn how much a decision is a part of a process in the political world. However, on the job training should not necessarily start after the student leaves school. A win-win situation proposed by Mr. Øvlisen is that Business Schools start to consider the impact of their own activities. Involving students in this type of activities would provide them with ideal training (climate change related) experiences before they enter the labour market. Looking into the future, business schools need to open, speak up and build trust with their stakeholders and shareholders.

Arne Mogren, Vice President of Climate Policy, Vattenfall

We need to have a sustainable use of natural resources and at the same time keep up the economic growth. Climate change is a global problem and should be seen as such. It is possible to meet and solve the challenge but it takes leaders that can change the society. For that business schools need to develop the required competences.

Sustainability is a relative concept and we need to understand how to apply it in different situations. However, not only an understanding of sustainability is required. We also need to comprehend how society works at large and the role business can play in forming the future. That is something required because leadership is not about leaders it is about leading society in the right direction. However, today it is hard to find leaders able to communicate, at the level beyond talking. Leaders that can change society should be able to see challenges from different perspectives. Theory is limited, thus we need theory into practical situations and recognize what forces need to be combined in each situation.

Claude Fussler, Programme Director, Caring for Climate

Climate change is not an isolated problem and for that reason we need to get everyone to mitigate the effects. Measuring, verifying, and reporting are key tasks in extenuating its effects. One of the four key competences proposed by Mr Fussler is 'reflective leadership'. That is putting ethics and values at the top and looking for better governance and responsible excellence. It is essential to focus on needs as business cannot have a success if they know what the essential basic needs are.

Session key take-aways

- It is important to show business students that climate change/sustainable issues can also be profitable.
- It is essential to understand the political aspects
- There is a need to move towards long term thinking
- Mindfulness
- Community time spirit
- Innovation skills and creativity tools, imagination.
- Ethical competences, being able to identify and analyze the values
- Communication skills, speak with stakeholders, communication and trust

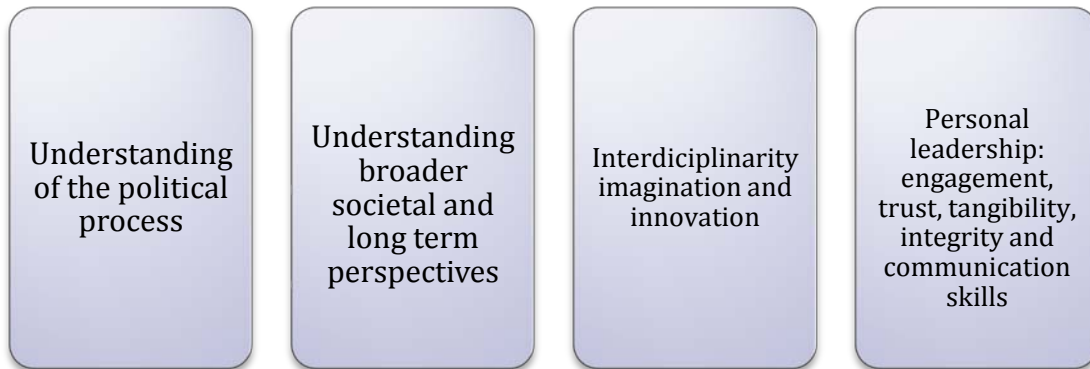


Arne Mogren



Claude Fussler

The business round table identified the following four competencies



KEYNOTE: Business Schools, Society and Climate Change

Andrew Kakabadse, Professor, Cranfield School of Management

In Mr. Kakabadse's opinion the four competencies found above are quite interesting although he points out that whatever you say in theory, in practice you will put no habit into practice. He continues analyzing the reality of the city, based on a survey he was asked to do for an international organization. Two main questions were tackled. What really happened before the financial crises, and what will happen next? Will managers learn from the past?

Results were surprising. In the survey, conducted in more than 20 countries, not one respondent said he did not know what was happening before 2007 and moreover, those who are most qualified MBAs or those who are most risk management qualified in banking, emphatically shown that not only is nothing going to change, but people tend to *resist change*. It is easier to continue 'business as usual'. In the survey the signs of a free and open market where spare if not lacking, although he saw a slight progressive tendency.



Andrew Kakabadse

He noticed a consumer pull, but also an increasing number of intermediaries in almost all trade operations and he found in these intermediaries a grab. That is why he assures that we are in a market that is not open except for those who have resources and is the intermediaries grab which make this buoyancy work. After analyzing the current society, he sets out the question of where all this has been really thought and what should the role of Business Schools in society be.

Business Schools must be very clear when talking about capital issues. He raises the question until what extent Business Schools adjust their teaching to the reality of for instance the financial crisis and provide challenge to business and the capitalist position to the point where it hurts? Claude Fussler encourages Business School to share visions and speak up and talk about what is really happening. He promotes a necessity of critical theory as opposed to functionalism. The functionalism mentality should be broken and Business School should be give clues of how to put CSR into the practice. According to this, Business

Schools and Faculties have to gain credibility. Real experiences are required and a creation of a skilful contextualization is needed to achieve progress.

Another challenge that should be tackled is the teaching process. Business Schools have to teach *well*, otherwise any former student will not be able of remember any little detail of what they were though and consequently they will not be able of putting it into the practice. He finalizes his speech stating that although he sympathizes with the four identified competencies an open and honest debate is needed to know the reality of their application. This being said, the four competencies are a great starting point.

PLEANARY: The Role of Business Schools in Solving the Climate Challenge and New Approaches to Curriculum Change

Plenary identified four drivers/ best practices for curricula change



KEYNOTE: Climate strategies for business

Andrew Hoffman, Professor, University of Michigan

According to Andrew Hoffman Climate Change is a business strategy, meaning a marketing shift which poses new questions that leaders must be able to answer. However, the question is not: how much does climate change cost? The new question that climate change arises is how much is it going to cost to the competition? He goes on and poses the question of why are companies reducing their emissions? Is it philanthropy or strategy? Through his optic companies obviously have a range of reasons to invest in the emerging climate change mitigation and adaptation markets - depending on their business profile and products.

He exemplifies the statement that Climate Change is a business strategy, arguing that energy efficiency often pays on bottom line, as investors pay attention to new market shares, such as green tech. A development, which is further spurred by growing consumer demand. As an add on to the investors' and consumers' interest in these new markets and products Hoffman points out how such a strategy can be a way of preparing companies for anticipated governmental regulations and thereby eliminate uncertainty. Such a strategy can also enhance corporate reputation and seeing climate change as a business strategy he points towards the benefit of being a first mover.

Having looked at the positive side of things Mr. Hoffman acknowledges the forthcoming challenges of this approach and touches upon the problematic measure of intangible assets such as reinforcement of corporate culture and top recruitment. He points out that action should be taken strategically and mentions some considerations. First of all it is important to ensure strategic timing: not too soon, not too late, teaching and taking people on board takes time. Secondly, you need to establish an appropriate level of commitment: how aggressive is your strategy going to be? Do you want to be a firstmover or follower? And thirdly, influence policy development. That is, policies will benefit those companies and those competitors sitting on the “legislation table”. It is all about creating business opportunities. Thus, climate change strategy should move from risk management to the core of the business management. It is not just an “add on” and if private companies take part in climate change, climate change will be saved.

Student Perspective: Assessing and meeting the Student Demand for Climate Change in the Business School Curricula

Ernesto Luna, President, AISEC Copenhagen: Developing Global Leaders in Sustainability

What are the lessons learnt from the not-for-profit sector? Climate change needs to be the priority in everything we do, both in practice and in our mindset. How can we then incorporate climate change in the curricula?

The first question then is what are the students’ demands? AISEC made a survey among their members and the preliminary results tell us that business students are not aware of the direct causes and effects of climate change. The attitude is that the solutions lie more within politics and technology. A fifth of the respondents claim to be very engaged in the climate debate. So in conclusion one can say that there is interest, however very limited knowledge. We need to build awareness to this problem among students.

The focal point to address is the non-for-profit sector. Why are students using more time in NGOs than in school? Organizations such as AISEC offer practical experience and a possibility to develop leadership skills. Business schools are very theoretical and do in general not provide opportunities to test the acquired knowledge in practice. The institutions need to open their eyes for the work done in the not-for-profit sector and value the time students spend in organizations outside of school. The focus shouldn’t be on changing the curricula, but to *value* the activities outside of school and incorporate this in the education, for example through ECTS for voluntary work and internships.



Ernesto Luna

Ida Hemmingsen, DEVELOP and Nicolai WELL: Student Driven Responsibility in the era of Climate Change

Business leaders need to think about climate change and a good place to start is with the students. There is a need to create motivation amongst students to engage with the climate issue. So the key question is: “How to integrate climate change into the curriculum”?



Ida Hemmingsen and Nicolai Jørgensen discover the relevance and the need for business challenges and opportunities within the climate change agenda. The students also need to be rewarded for the activities they undertake. Exam results could be part theory based, part rewarded for projects undertaken or how the student has educated himself/herself in climate.

Introducing mandatory and non-mandatory practical experience through hands-on experiences can help engage the students. In this manner they will experience a synergy between what they have read in the books and the practicalities surrounding it. DEVELOP & WELL are already creating events driven by climate conscious students, but we need to engage all students, and expand their knowledge about the topic from day 1 at CBS. By creating courses and workshops around climate change and business, students will

Business Schools should seek to create partnership with those students/student organizations that already work within the field of climate change to seek to influence even more students. This could help promote the needed curriculum change toward more practice, as students spend their time on things important to them because of their passion. We must ask ourselves “How can we elevate that passion into the curriculum”? And instead of forcing the courses upon the student, we need to credit the diverse extra activities they undertake.

Another profitable partnership in terms of integrating cross course activities and practice in the curriculum could be through engagement with DTU and Lund University. Solutions come from technology, but the business dimension is just as important. We need new business models that foster green thinking. And we need more cross course activities. We could open a course with DTU & Lund University on clean-tech to get green technology commercialized. WELL and DEVELOP have worked a lot with PRME principle 5 & 6, and encourage that students become a part of creating a vision of society for 2050. Also that the school engage in strategic partnership to foster value creation.

Robert Strand, Net Impact: Engaging Students as Curriculum Change Agents.

Net Impact organization is a very large and active organization in the US, with more than 10,000 business students taking part in it, which rely on the power of business to create a more socially and environmentally sustainable world, not only regarding the climate change. Its aim is to connect the activities in Europe and the rest of the world with the activities in the US, not so that US can influence, but also create dialogue.

In fact, business students are considered as agents of change because:

- Business students don't have the boundaries of political, accreditation etc. so the best agents for change
- Net Impact chapters have a strong voice in the US schools, through it the students have a voice to demand CSR content in their schools. They demonstrate demand for it.
- Networks like Net Impact can be leveraged to push the PRME agenda
- Engaged business students are the foot soldiers for PRME.
- Most effective way to perpetually drive PRME – provides an already existing infrastructure
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After the Net Impact presentation, an interesting round of questions and discussion started, as we summarize on next page.

Other comments from students pointed the necessity of promoting awareness, referred to examples of the guest speakers from large companies invited to their class who actually stated that they didn't need to worry about CSR because it didn't impact the bottom line. So there's a need to plant the seeds and develop awareness. On the other hand the feeling is that students are at university to learn, to have an opinion and gain some tools. Those tools are missing. Maybe Net Impact is a good way to energize students.

Claude Fussler (CF): The concept sounds nice, but is not convinced that the organization has actually caused change in school curricula etc. Asks for examples or facts to substantiate:

Robert Strand (RS): no specific numbers but refers to the potential and the momentum of students, the alumni in the business community and the influence they can have on the schools. Also, there is a benchmarking tool on the website. This is used to benchmark against other business schools on sustainability content in the curriculum.

Christina Duevang Tvarnoe (CDT): explained the resistance she experienced in trying to introduce a mandatory CSR course in her curriculum (Law and Economics) – students weren't interested, preferred financial crisis course. And the professors aren't inspired to research or teach in that subject – the only one was carbon trading.

RS: incremental steps should occur before curriculum change. Less of a top-down approach. Needs dialogue to get to that change. There is a passion in the students, just haven't tapped into it yet. An organization like Net Impact would get them engaged.

CF - it's a sales pitch, not impressed by membership # and all these activities, wants to hear about the actual results and what they've been able to move on the climate agenda and curriculum.

RS: GE's Eco-imagination, using Net Impact students to effect change within their program and are even hiring them. Brings the students with those interests together, real impact is in building a community of future business leaders on these topics. Couldn't provide examples re: climate curriculum

PM: what would students want in their curriculum?

President of OICOS: Business students, economic students, very much taught about how to compete, but not about how to cooperate. Would suggest a joint collaboration or partnership between OICOS and Net Impact. How? Joint projects?

RS: would be open to it, already starting. Agrees that cooperation isn't in always in the US business school vocabulary, agrees that it could help.

PM: A lot of this is successful because in US – a lot of MBA programs, could this work in the MSc or other programs that are more common in Europe? Could it work with a different breed of students?

RS - What's different in the MBA is the professional network between students and alumni. There are professional chapters of Net Impact that engage with industry. Not many in Europe, but growing.

Student – likes the emotional side of CSR, but there's an intellectual trade-off. Students often choose what they need, not necessarily what they like. For example, "I need a job" "I'm concerned about the environment, but I go to school to get a job". How do we break that gap between moral imperatives and personal imperatives?

PM: students are actually thinking about that dilemma, so that's a start.

CDT: more important to have a CSR mindset in traditional fields, not to take on a CSR job per se. But also students need to be made aware that there is a new sector in the job market and in business for CSR.

PM: How do we harness this energy and interest in a productive manner in our schools? There's a desire and a demand that's not being met, so how do we overcome this?

RS: Student representatives could lobby for these changes. One suggestion was to create a challenge for the students and the educational institution(eg. Create a carbon-neutral campus) We try to incorporate business strategy and practical components in the curriculum – stop preaching about values etc. we already have them. Tell us as students how to make this financially sustainable and implemented in the business.

Regarding example of schools that have a revised curriculum that integrates CSR across the board, the way you implement it is through responsible leadership, by engaging business, government, stakeholders etc. You "trick" the student into it by incorporating it into traditional business courses.

Students have all this energy that they use organizing parties and events at school, they become entrepreneurial and creative through that process – that's how they learn. Through hands-on experience, students realize the benefits. Same energy could be used in CSR and climate change.

Patricia Mesquita, oikos international: Students as Educational Entrepreneurs

Patricia Mesquita from OIKOS described the work that OIKOS does in business schools across the world. OIKOS is a student organization focusing on integrating sustainability and climate topics into management and economics curriculum. The organization was founded in 1987 by students at the University of St Gallen and was the first student organization of its kind. Now OIKOS branches all over the world including Bangladesh, the US, South Africa, and India. Patricia described how recently the organization has become more reflective, examining their own organization and questioning whether it is the right platform for their objectives. She described how traditional entrepreneurship research provides very few insights into how to deal with sustainability challenges, because they generally see entrepreneurship as an inherently positive force for society, creating wealth and delivering value.

New research on Social Entrepreneurship has divorced itself from traditional entrepreneurship, freeing entrepreneurship from the responsibility of private wealth creation and focusing on social change. Patricia demonstrated the concept of “entrepreneuring”, a verb focused on doing a creative process rather than simply a discover process. OIKOS and other student organizations should serve as a platform for students to be exposed to the equivocalities of sustainability issues through the experience of entrepreneuring.” However the reality is that students struggle to inspire and motivate other students. We have a romantic view of students as active participants, but it is difficult to motivate students due to tight schedules, exams, and little space for students to experience and be exposed to issues relevant to society. Students face great challenges when attempting to convince faculty members to teach what is relevant for society.

Organizations like OIKOS and net impact still exist because there is still a need, and still far to go. Patricia gave an example of a recent project called the OIKOS Climate Curriculum Challenge, which aimed to get students in various OIKOS chapters to approach a “mainstream” professor and ask them to give one lecture on climate change that would be videotaped and broadcast for the Oct 20th 350 day of action. While 20 chapters worked on this project, only one chapter, in Bangladesh, was able to succeed, partially because in Bangladesh, climate change is a part of everyday life, and thus is already covered by mainstream professors. Patricia’s message was that while students have a large role to play in changing Management Education, we can’t expect to place all the responsibility on students’ shoulders to become the leaders that society wants. After a discussion of the issue, the room settled on the following wish to bring back to the conference:

Students have the drive to change curriculum, but they can’t do it on their own. There needs to be top down leadership that enables students to motivate each other to integrate sustainability into the curriculum. Sustainability needs to be integrated into mainstream curriculum, need to confront them with empathy in their courses, and they need to be incentivized with credits.

Four wishes for curricula change as identified by the student organizations.

Integrate and reward extra-curricular student driven activities, not necessarily credits

Engaging inward (business school administration and faculty) and outward (strategic business partnerships) seeing initiatives as a part of a larger vision for society

Active students should act as ambassadors in promoting climate change curriculum

Sustainability needs to be integrated into mainstream curriculum

DAY 2 OPENING COMMENT: Business Schools and Climate Change: A Critical Reflection

Simon Pickard, Director General of EABIS opened the second day with a critical reflection on management education and climate change. His presentation evolved around the key points of innovation, interdependency, interdisciplinary, interconnectedness and insights.

PARALLEL RESEARCH SESSIONS

PARALLEL SESSION 1A: Operational efficiency: the immediate climate response by business

Johannes Lunenborg McKinsey “The CO2 Abatement Curve”: Johannes based his talk on the McKinsey abatement curve. After a brief introduction of the concept, he carried on with some findings from V.20 which show the need to reduce with technical measures GHG emissions. He pointed out the reasons why operational efficiency is not being reached (market failure, lack of staple international system for power & industry and disagreement between government and market forces to drive down costs). However there is some good news within the findings from abatement curve. On the one hand costs are large but manageable. On the other hand, warming could be contained below 2 degrees with high probability only if we do it all together. Here is where industry, Business Schools and society in general come into play. He analyzed industry’s position and response setting examples of leading companies, and ended his presentation with the implication for Business Schools on the field. Business Schools should carry out applied research on economy, in a micro and macro level, facing real challenges and practical actions. They also have to pay attention to regulation and time dynamics for business strategy research, and also develop a cross functionality character.

Barend Van Bergen “Climate Changes Your Business”: Barend articulated his presentation trying to answer two big questions. What can be done now and what should Business Schools do? Answering the first question, hopefully a lot can be done now. From a leadership perspectives to an economic one thing are changing. Leadership is being now rewarded, as well as game changers. Also leadership is trying to factor externalities into the economy. However there are some challenges which can not be faced yet due to the macroeconomic perspective which governs the business world. In fact if cost curves and analysis show that as long as business says it is not important, it is not. Once again, Business Schools show as key agents because they are conceived as leader institutions by students. Furthermore, they should look beyond regular business thinking and not stop in the classical standard business practice. Barend Van Bergen, as a KPMG representative, continued his speech explaining his company’s contribution to the global debate. They found a mismatch between macro cost of climate change and the business confidence. They take stock of all public disclosure business only sees opportunity, not risks, although there are at least 3 main risks (direct, physical risks, and indirect risks). That is why they analyze the most influential studies and try to quantify the associated risk, building the starting point for the debate. Here appears another challenge for Business Schools, who should take this further and do more case studies. So, despite the fact it has come a long way during last 20 years, there is yet a long distance to be covered to achieve the goals. It requires action at the sector level, more fact based discussions about what sectors face and can do, leadership from business associations to help companies interpret the challenge and an engagement of the

stakeholders in the debate. From a companies' perspective they should understand risk management scary to see what is understood about climate change, seek for investing opportunities, create value staying in the course, disclosure need balance and transparency

Charles Nelson “Reversing the Numbers in Energy Production and Consumption”: Charles established the goal of coming in with cases, not discuss macro economic aspects. Business should focus on the following issues. There are many evidences which show that energy system and climate are colliding. Based on this situation DONG Energy and companies in general wants to move from 85% fossil fuels to a company that is 15% fossil and 85% renewable. These sources should be primarily the wind, biomass and the conversion of coal to pure wood chips. Obviously a big effort in innovation is required. In fact is not easy to move from a society built on fossil fuels over last 200 years to rely on renewable energy especially when fossil fuels are the basis for our welfare today. So we need to rethink how to introduce expensive new tech into the current system. The challenge for Business Schools is to understand the paradigm shift from fossil to renewable energy systems- and consequences, as part of knowledge understand the mechanisms of the system you are trying to change, focus not only on economy, but also on technology. They also should be able of identifying new business opportunities for low carbon solutions and clarify how to make decision in this uncertain future, because students know how to make decisions in coal, oil, and gas

PARALLEL SESSION 1B: Public policy and regulation

The parallel session “Public Policy and Regulation” addressed different approaches to research for improvement of political and legal frameworks for climate solutions. With the presentation “Incentives and Legal Barriers to Smart Growth” Professor Ellen Margrethe Basse, University of Aarhus provided the Smart Growth (regarded to urban development approaches) as one solution for facilitating the development of appropriate public policy and regulation and the fulfilment of the void between scientists, business people and politicians.

Ellen Margrethe Basse “Incentives and Legal Barriers to Smart Growth”: Margrethe analyzed the US Smart Growth and European Cohesion Policies within cities as they are home to jobs, firms, and institutions, and thus are closer to people. Municipalities should in addition to government’s power have the authority to reduce urban sprawl, rehabilitate the physical environment, improve management of natural resources and invest in sustainable energy and transport. The possible incentives structures for promoting a smarter growth mentioned where

- Co-regulation and self-regulation are interesting approaches in the EU
- Incentives with investments and economic instruments
- Public procurement, taxes, charges, subsidies, etc.

Behind the need for Smart Growth, there is a lagging legal framework. However when law is not flexible or up-to-date it may act as a barrier, which is unfortunately the case in many areas related to the climate change issues. That is the reason why self-regulation is becoming more abundant. Regulation tends to protect the administrative and sector interests often leading to in-optimal structures violating the necessity of integration between the different legal layers. Conflict of interest due to preservation of power can hinder smart growth.

In her speech Ellen Margrethe analyzed the Danish example of industry regulation which suffers from lack of integration among ministries, separation of competencies and authorization entities making optimal regulation in favour of smart growth difficult. Another severe barrier to smart growth is the notorious protection of private property in the legal tradition. The principle of specialization as well as the principle of legality often implies that smart incentives are not realized due to holes in the legal framework. If incentives are not written in the public law it simply is not possible. New enabling statutes are required to give authority to municipality level, giving incentives to think outside the box. Resources are urgently needed for the process of legal change, and more legal research is required to reach the desired smart and sustainable growth.

Jacob Park “Sustainable business strategies in Asia”: Jacob Park, Associate Professor at Green Mountain College, focused on the sustainable business strategies in China, Japan, and South Korea responding to Global Climate Governance. Jacob compared the current debate with last century’s debate around State involvement in economic development. The trends in national spending and public policy concern regional Disaster Risks related to climate change, energy use, growing public concern about climate change and green economic stimulus as a result of the economic crisis but, is the system resilient and flexible enough to deal with climate change issues?

What is obvious is that public concern is raising and raising. However it shows a huge discrepancy in terms of data. In fact most people have climate change on their mind, even if they might not understand the science behind it or the potential impact. They might not spend more on ‘green’ products, although the awareness is much higher than 5 years ago. Jacob also addressed the unclarity of the labels ‘developing’ vs. ‘developed’ countries. Sticking to this un-nuanced two group distinction masks the differences among the countries within those categories. For example: Japan’s growth rate to 2030 is 0.1 vs. Mexico 2.3 or regarding growth in CO₂ emissions Korea is still classified as a developing country, but the 11th country in the world.

One brief analysis about the higher political field shows how, despite regional differences in growth and energy use, Asian governments are far more focused on promoting a Green Economic Stimulus than Western. The take-away or suggestions for researching were, focusing beyond USA and EU, research business and industrial impacts looking at the competition, comparative etc. It is necessary to consider new entrants as well as market shifts (what do they involve and for how long). The third key research area should be Scalability. How do smaller firms become larger firms while staying ‘green’?

David Levy “The institutional context of Corporate decision making”: David Levy, Professor at University of Massachusetts, provided the audience with a better understanding of the institutional context regarding Corporate Decision Making on Climate Strategy by pointing out the challenges in public policy to unleash capital and investment for a green transformation. David sets out a conceptual frame to understand the context, where he showed how markets embedded in governance networks. Thereby problems with governance appear, as for instance complex dynamic and often cumbersome system and institutional features – they wait until the crisis is just around the corner to throw billions of USD at it. Recent example is the financial crisis, but the difference is that the consequences for climate change are more permanent and long-term. Besides the governance problems system inertia causes instability for sustainable development. The phenomenon of inertia is prevalent in a range of sectors and systems: as well the energy and utilities sector as the economic sector but also many public institutions are characterised by this. Cultural and social habits are also inert.

Multinationals are important players when it comes to drive the green change but the question raised is whether the political system can keep up even though progress is seen among corporations we still cannot rely on them to march in the same direction of a low-emission economy since strategies differ, and business models are very diverse and renewable technologies tends to be risky. It is also important to bear in mind the regional differences in strategies. In fact the regional political and market contexts are different (For example: US vs. EU) and the perception of consumer preferences get institutionalized (for example, car companies think US consumers will never go for diesel cars). We also could find conflict between EU and US headquarters of companies however, they are developing a more common outlook on markets and climate strategy and firms are developing global climate strategies.

PARALLEL SESSION 2A: Innovation and low-carbon technologies

Jonatan Pinkse, Challenges in Corporate Innovation for Climate Change

The start of Jonatan's speech raised the question of why some companies are innovating in the area of climate change while others are cutting back. The evolving carbon market is supposed to create incentives and lead to innovation, but we face a number of challenges to innovation:

- Complexity of innovating for climate change:
- High risk
- Some companies still profit from high emission production

Innovation could be viewed through 3 different lenses: Technological change, socio-technical system, complementary capabilities and is threatened by three dilemmas: exploration vs. exploitation, niche development vs. hybridization, cooperation vs. competition. The main points developed in the first dilemma (Exploration vs. exploitation) are:

- Technology development vs. technology deployment
- What should we concentrate on to tackle climate change? Scaling up or further development?
- Should we throw a lot of R&D money, or should we focus on existing technologies, push them more and scale them up.
- If we concentrate on existing technologies, there is a risk that the focus is on old-fashioned technology, ignoring new and better ones.
- Example of fuel cell development:
 - Stabilization wedges in the car industry (fuel cell, electric, hybrid, etc.)
 - Companies focus on different ones, but not all focuses will be successful. They have to bet on certain technologies

Regarding niche development vs. hybridization

- Business schools can't research the science, but can look at the commercialization of certain technologies or on market research (niche or mainstream market)



Jonatan Pinkse

- Challenges of hybridization. Example of carbon-capture as a hybridization for existing companies
 - Problem is the technology is not linked with what they are selling; it is far removed from existing business.
 - Difficult for the company to create a mainstream market because it too far removed from the commercialization of their other products (e.g. solar developed by oil companies).
- Maybe the business model is more important than the technology itself
- Example of solar power, grid-connected vs. off-grid
 - For off-grid, the business model needs to make it more accessible or desirable for the consumer, maybe incorporating in the price of a house.
 - Building industry could actually do it, but are not. Why? They outsource everything. Solar means new partners, new technologies, etc. aren't willing to take the risk.

And Cooperation vs. Competition:

- Partnerships are useful for lobbying, but not new products or technologies
- Example of Desertec foundation – solar from Sahara. Stakeholder involvement and partnerships.

The role of the consumer is vital in terms of accepting new technologies although consumer' behaviour is still rather unknown why research is needed

Q&A

- Trade-off on climate goals and other sustainability goals: To what extent could the extreme emphasis on climate have a negative impact on other issues? JP: Biofuel example - invested in palm oil, but was actually destroying forests in Malaysia. Need to think beyond the immediate problem they are trying to solve.
- Would you distinguish between disruptive and incremental technologies?
- JP: Disruptive for whom? Depends on the stakeholder (example solar for oil companies vs. solar for electricity companies)
- Core competencies – is it just American companies that can't transition from one technology to another? Compare to Japanese companies.
- Business model changes are important. In business school, we also talk about changing from complicated to simple technologies. Should we try to push complex technologies instead of looking into simpler more easily promoted technologies?
- JP: It's not just the technology, but also the business model. Different business models can make technology more accessible (example of free cell phones, but pay for service). Government investment in green technology. How is the financial crisis going to impede these developments?
- JP: bailout plans have green components, but doesn't know to what extent. Companies aren't really good at using these subsidies. Another problem is that the stimulus is intended to make immediate economic impact but not necessarily best choices in the long-term.

Kim Ostrup, IBM's Build a Smarter Planet initiative – a Case of Platform Innovation",

Innovation is coming from many sources and many different environments. At the same time the world is getting smarter, interconnected and intelligent. In that context IBM is trying to invest in and explore smart, interconnected and intelligent technology:

- Smarter: Remote monitoring capabilities
- Interconnected: virtual marketplaces between consumers and providers allow flexible trade
- Intelligent: sensors, smart meters, digital controls on power grids. We can respond to changes quickly and accurately. It's not just connecting people, but also connecting 'things'. 'Things are talking to things'.

Examples: Smarter water is the next sustainability issue. Also smart traffic, smart oil, smart food (ability to track where the food came from), smart cities, smart retail etc.

Kim also believes in an open innovation. Big solutions can't emerge or thrive in a closed architecture. Internet is the example – open source is an example of sharing and building on existing technology and existing ideas. (Wikis, university databases, etc). All the places where you have networks in place, open platform, open eco-systems. These open concepts can inspire progress in other areas like energy and utilities. Energy use is projected to increase by 37% by 2030. There is a need for progress, but also the opportunity for progress – reduction in peak loads, savings in infrastructure spending, etc.



Kim Ostrup

Energy and utilities:

- Production side: The grid should be sourced from an open 'virtual' power plant. Any energy tech and producer can add to it. Provides access, but also open so that the investor can see it.
- Consumer side: the appliances that use the power should speak to the source and to each other. Could the tv automatically go on stand-by when needed? Could the house collect rain water and use it for the toilet. Could people make a business out of that?
- Also, the ability to adjust production/consumption according to prices (peak-load prices etc.)
- The solution is to shut something off automatically when there's a peak, but the pre-requisite for is smart technology

Kim mentioned three reasons to invest in new energy; First, investors need to see that this can be a business connected to the end-user/consumer, secondly all kinds of appliances can be connected to the net and finally investing in smart tech like these and developing the infrastructure would provide economic development (jobs, etc.)Conclusion

- The prices in the market don't provide incentives for this type of structure or system, there is no price discrimination.
- If you have price discrimination – economic structure will be an incentive to developing this innovation platform
- This could also become a service industry

Q&A

- There are already smart systems within a closed system (For example, the electricity provider determines which consumers can access these smart systems).
- KO: advocates for an open system instead of a closed one, but this is his personal view, has no research to support it. That's why he is advocating for more research on that.

- IBM would like to provide an open infrastructure. What is the revenue model for that open innovation architecture?
- KO: Would involve some IP, but would also be shared. Still working on that. Working with customers around the world to build that

- There is some work on the grid science, but no work on the consumer side – very regulated and based on what the utility wants to do. How do you account for that?
- KO: this is an economic policy issue, not just science. It's going to be difficult because there is such a strong economic interest in it being regulated

- Looking at history, there's not much evidence that this would work unless someone at the government level decides that this is the way it will go. For example, the highway system is the way it is because government invested in it and planned it that way. How would this heavy investment and government planning come about?
- KO: If it's going to be an open architecture, needs to be an open developed process (like how the internet evolved). Needs subsidy and government investment to promote the infrastructure, higher energy prices and strongly differentiated energy prices are the key, not government investment in the infrastructure. That's my suggestion, but research needs to be done.

Christian Erik Kampmann & Jens Froslev, CBS: Open Business Dynamics and Systemic Aspects of Sustainable Innovation

Based on the Boston Consulting report from September 2009, Christian and Jens mention management perceptions of sustainability as a strategic driver. Indeed perceptions have changed in the sense that more executives believe that it has a material impact on business. The challenge to face is due to sustainability issues are highly complex, systemic and interrelated

BCG Report paints a bleak picture – sustainable innovation is still an uphill battle. Why?

- Immature technologies and controversial science
- Barriers when trying to cross firm boundaries
- Green vs. convenience, power, price for consumers
- Generally not supported by existing standards
- Established markets aren't sustainable



Christian Erik Kampmann & Jens Froslev

Christian Erik and Jens mentioned some challenges to possible solutions

- Cradle-to-cradle – can't do it without involving a lot of stakeholders. It is difficult to engage them. That is also a major reason why it is difficult to get businesses moving.
- Wind power in Denmark:
 - It was a challenge to negotiate with utilities and the government to get the turbines connected to the grid. It took heavy negotiations on pricing etc. It was eventually solved, but it was challenging.
 - Future design prospects – wind farms are moving off-shore. Using old off-shore oil capabilities with the wind farms adds to the complexity.
 - Also using the energy surplus efficiently (how it could be stored, etc.). This goes beyond the wind turbine industry, needs to involve other stakeholders.

Smart grids could be the answer to some of these challenges as they support a wide variety of green advances. A better understanding of socio economic system dynamics could assist to promote a smarter development. At the same time, there is a clear need to engage stakeholders. That implies that businesses need to reveal some of their own knowledge to third parties. From this ground, it is possible to start designing an innovation system with the following key strategic parameters:

- Closed vs. open interfaces
- Integral vs. modular/standard interfaces
- The more complex the systemic features, the less likely they are to be effectively controlled in a closed system

Rapid and radical technology change is better accommodated by open and modular strategies than by proprietary strategies. What is required from business schools are skills in open innovation, system dynamics, modular strategies, and public-private collaboration to exercise ambitious and broad-scoped sustainable innovation strategies.

Research topics identified

- Trade-off climate vs. other sustainable goals
- Disruptive technology in CSB – for what industries?
- Regional differences in strategy stances?
- Adapting technology to consumers – research on consumer habits/perceptions/attitudes
- Financial crisis and other pressing agendas – impact on government policy, consequences for green industries?
- How do you create industrial or informational “eco-systems”?
- Economics of network effects
- Developing innovation platforms
- Developing investment platforms
- Motivating/affecting consumer behaviour using technology
- Actor behaviour in platforms (ex. Workings of electricity markets with smart grids)
- Scaling the systems – role of government (analogies from development of US Highway infrastructure)
- Methodologies for modeling business and socio-technical systems
- Open innovation strategies for sustainable system development
- Standards / modularity
- Risk in developing and disseminating innovation: actual and perceived risks – familiarity
- Energy systems as a focal area

PARALLEL SESSION 2B: Leadership in partnership – how do we make scientists, business people and decision makers communicate

Patricia Plackett, CBS introduced the parallel session “Leadership in partnership” with reference point to cleantech clusters – their form, purpose and dynamics. How the cluster structure possesses the potential to capture knowledge spillovers and drive innovation; and how knowledge sharing is infinitely better facilitated in synergistic relationships. Summing up, there is no doubt that the cluster way of organizing innovation is the way to go, which also the growing number of cleantech clusters around the world shows. Patricia mentions Masdar City as one of the most auspicious examples of this. However, in order to tackle the challenge of climate change, even faster progress with regards to new energy solutions is needed: we need to optimize these clusters.

Thus, one of the most important research focus areas now for managerial, organizational studies and production economics is to achieve a better understanding of how these cluster perform, what makes some more effective and productive than others and are there factors that can be adjusted in order to enhance productivity and innovation. Hsinchu cluster in Taiwan is mentioned as a successful example, seemingly benefitting from international experience and cross-cultural approaches to collaboration.

But not only do we need to understand the interactions within the clusters better, perhaps even more important we need to understand the relationships to surrounding society – the collaboration between scientists, politicians and the industry. Seeing cleantech clusters as embedded in larger societal structures, raises need for further analysis and theoretical understanding in order to equip us with the tools needed to optimize outcome and drive positive development.

Some focus issues are

- Understanding of these larger systemic structures - how they come into place and
- Understanding the drivers for successful collaboration and communication
- Understanding the detailed processes of successful open innovation.
- Research in management of intangible assets.

Emily Huc, ESADE, focused on greening business by learning from leaders on sustainability. During the past years there have been meaningful training and environmental advances which have allowed the creation of new business models on energy and resource efficiency. In order to approach the change we should provide case studies and analysis which inspire leaders.

Towards a green paradigm: Core of research on organization changes. The increasing demand for students to learn about green topic generates a necessity to create and transfer knowledge to future leaders. Currently Emily is carrying out a research about how knowledge is created and assimilated within the companies, and although she has not reached definitive results yet, there are three thoughts already latent. One is the centrality of change agents, who inspire people to engage with issues and thus leading to innovative approaches. The other one is the importance of integration within all technical areas and at every level and last but not least the collaboration with supporting organization

Daniela Beck and Susanne Kaldschmidt analyzed the supporting values in communities of practice issue. Values are important because they are influential to decision making. When the decision maker takes decisions, knowledge experience and personal values go into it, but, what are values? They recognize that in general terms there is not much being done to define what they are. However the values, which an individual hold, guide actions and behaviour. In the Climate change era, there have spring up new values related to sustainability. Leaders of companies who are sustainable have value priorities in openness to change and self transcendence.

Looking at Business Schools they could become a source of influence in value priorities. Although they can not impose values, as they are socially constructed, it would be fruitful if Business Schools are considered as communities of practice where values are challenged. And this could happen if the perception patterns are open, if dialogue sets off alternative perceptions and if there occurs an exchange of different perspectives.

Carole Parkes, Aston Business School, one of the most ethnically diverse top Business School in UK, laid out on the table two main topics. Climate change and her experience in engaging different communities with sustainability. In charge of the Corporate Responsibility and Sustainability area, Carole reflected her commitment to embed the 6 PRME principles in her own organizations. Regarding the first topic she analyzed UK facts against climate change and although congratulated on UK the activities it has set up to prevent climate change, there is yet a need to collaborate with powerful people and communities to achieve success. She also raised the debate about the policies changes which need to happened and the palatability of them.

There are two main audiences we should consider when speaking about these issues. Those who know about science and those who don't. And no matter which audience we are addressing, we should have clear that Businesses, as well as Social Science and Education plays an important part in this.

Introducing the second topic, Carole took Birmingham's community groups as an example to show engagement with sustainability. Conducted by a multidisciplinary team they research areas of good

practice, perceived and actual barriers and examined triggers that motivate individuals to move beyond intentions into actions. Starting the research with a mixed methods approach, comprising of initial survey to establish concepts and exploratory questions, and followed up with ethnographic research methods involving observations of practices, interviews and focus groups to gain insights and explanations, they reached to some initial thoughts.

Unfortunately the initial finding is that there is a latent problem with terminology (access to language). Moreover the examples of good practice are unrelated to “sustainability”. So the challenges are to take unknown to know and to make it relevant. And this could be done by the Business Schools through practical examples.

Four identified social science research topics



Workshop

Leading up to the workshop on Teaching Climate Change and How to Transform Research into Learning Julia Clarke, Leeds University, Mark Lowman, Winchester Business School and Terri Friel and Josatta McLaughlin, Roosevelt University, USA each presented peer examples of curricula change addressing climate change.

“Revalidating and Validating Business Management, Event Management and Accounting Undergraduate Degrees Using PRME” Mark Lowman, Winchester Business School

To be able to transform curricula and integrate ‘Responsible Management Education’ in a business school, a conceptual and context analysis is necessary. One needs to realize what the idea of ‘Responsible Education’ means to exactly their school. At Winchester Business School they clarified the purpose of the transformation process by connecting the PRME principles to the University of Winchester Values that encompasses justice, freedom and intellectual rights.

The curriculum

The goal is to integrate PRME across the whole curriculum. At Winchester they have started to focus on the undergraduate programs Business Management, Event Management and Accounting. The Business Management program thus starts first year with two mandatory subjects such as Responsible Management and The Sustainable Business providing the students with as well understanding of the importance of management and leadership and insight into the broad field of sustainable business cases. At third year two sustainability electives are offered providing the students the broader context of business in the surrounding society and environment. The Event Management program likewise starts first year with subjects such as Social and Economic Context of Events plus Events and the Environment. At third year the electives Green Event and Social Enterprise and Events further widens the responsible horizons. The Accounting programme offers courses like Transforming Business and Business Etiquette. Among extra-curricular activities Winchester Business School have established The Sustainable Business partnership together with the County of Hampshire. Mark Lowman mentioned the incorporation of action-based learning, the developing teacher faculty and the balancing of technical skills vs. ethics as some of the main challenges – thus at the same time opportunities they are facing at Winchester.

“An Inter-disciplinary Approach to Corporate Responsibility in the UK Higher Educational Curriculum”, Julia Clarke, Leeds University, Business School

In 2005 University of Leeds established a cross-curricular centre for applied ethics called - Inter-Disciplinary Ethics Applied - in order to develop ethical awareness across university curriculum. A true inter-disciplinarity was secured from the start as founding members included as well School of Philosophy and Faculty of Earth and Science. Broader collaboration happens through close links with other UK Subject Centres, including the BMAF in order to spread good practices beyond the borders of Leeds.

Concurrently as the Centre was founded, A Business Ethics Theme Team was established. Members include as well Business School as School of Earth and Environment Faculty Staff plus virtual members from the business community. The mission is to incorporate ethics and responsibility into the Business School curricula. The question is always whether these aspects and perspectives should teach in stand-alone

modules or be incorporated in the existing curriculum. Perhaps the most realistic is to integrate step by step. Since 2005 the Business Ethics Theme Team has delivered

- a series of case studies for first years of undergraduate studies;
- postgraduate electives modules;
- collaboration with MBA students on social enterprise projects.

The positive learning this far encompasses that students to larger extent than hitherto were brought into contact with CSR-professionals, that they applied ethical theory to real life business scenarios, and that University of Leeds extended their inter-disciplinary efforts into research and knowledge transfer. Among the challenges however are: the ongoing basic conflict of CSR: what is the business of business?; and not at least the competition with all the other themes and subjects already in curriculum. The most successful outcome has been the series of teaching cases that has proved an excellent tool for integrating ethics into business curricula and is serving a great resource for sharing with other institutions.

“Bringing Sustainable Development and Climate Change Materials into the Curriculum: Assessing Current Practices” Terri Friel & Josatta McLaughlin, Roosevelt University, USA

Friel and McLaughlin presented a substantial analysis of the challenge to teach climate change to business students and showed how the procedure was carried out at Roosevelt University. The task of teaching climate change to business students encompasses the overlapping triad of students, business and instructors and for a real transformation to happen all of these agents must be involved.

The questions are:

- What to business organizations need to know about climate change?
- What do students need to know?
- What are the implications of these climate initiatives for school of business?

The assumptions:

When it comes to the instructors, the conception is that instructors are in fact committed to disseminating reliable information about the environment, however they are concerned about their lack of training in this field. When it comes to the students, they have all been introduced to the topic of climate change through their pre-college studies, however, they are generally not convinced that solving the climate challenge is the responsibility of business and furthermore they still lack sufficient evidence that focusing on climate change issues in their programs and thesis will benefit them in the job market. The business community expects business schools to provide students with the skills needed to rethink business in a greener way and at the same time they want proof of concept that environmentally-friendly policies and business models will benefit them.

The procedure at Roosevelt for the examination has included:

- A. A survey among deans at business schools
- B. Examination of the Sustainable MBA at Aspen Institute
- C. Examination of Syllabi posted by AASHE
- D. Screening of Syllabi posted by other business schools

Overall conclusions:

Syllables generally do not focus on climate change. In the Sustainable MBA report from Aspen Institute only six out of 100 business schools have courses with titles indicating 'climate' or 'climate change', most of these being electives. The information on climate change that students acquire stems for far the largest part from extracurricular activities.

AD A) among the major challenges and obstacles to provide more courses and general knowledge on climate change to the students, the Deans mention limitations especially with respect to faculty expertise – since the far most common situation is that business schools use instructors with a business school background. This tradition also discourages the set up of cross-disciplinary courses. Another challenge is the sparse interest from students themselves. Deans see a need for champions to lead the way. The questions arising from these findings are: how can b-schools design courses in order to show how climate change affect business? How to teach scientific topics to business students?

AD C) Coinciding with the Dean's survey the AASHE examination showed that the general picture among business schools is that business schools are not hiring instructors and lecturers with science backgrounds and are not using multidisciplinary teams.

What does it take?

Deans indicated that they considered following initiatives to incorporate climate change into the business school curriculum to be very important:

- strategic initiatives at deans and top administrative level
- provide instructors with formal training
- hire instructors with expertise
- use multi-disciplinary faculty teams

Ideas to consider:

- Taking advantage of campus expertise from the disciplines already teaching climate change
- Identifying and rewarding the faculty champions to lead the way
- Engage instructors by i.e. build new support from bottom.
- Hire new instructors
- Provide support for establishing of inter-disciplinary teams

The workshop: "Teaching Climate Change and How to Transform Research into Learning"

After the best practice presentations the participants were divided in eight groups, consisting of at least one student, one professor, one business representative, one administrative officer staff or ngo. The purpose was to integrate the sought after competencies from Business Round Table, wishes from students, identified crucial research topics from researchers, plus best practice inspiration creating and competing for the best idea for curriculum change. The workshop was lead by Kai Hockerts, CBS. The judging panel consisted of Jan Molin, Dean of Research, CBS, Erik Kloppenborg Madsen, ASB; Patricia Mesquita, Oikos; Eva Born Rasmussen, Grontmij Carl Bro.

Each group combined of their choice 1 of the four competencies, 1 of the four student's wishes and 1 of the four research topic and inspired by one or more of the best practices from the plenary - plus the

presentations just heard - to roughly sketch an idea for an elective course on the theme of climate change. The groups only had as little as 30 minutes for this challenge and many didn't at all find this enough time.

8 groups worked intensely for only half an hour to come up with practical suggestions on how to implement climate change and sustainability in business school curricula. Proposals focused especially on cooperation with the business community, and the necessity of real life cases. To increase the bonds to the business community, group 1 suggested mentorship for internship in relation to project work.

Interdisciplinarity was also central to the majority of proposals. Group 5 for instance suggested a yearly cross-curricular theme course bringing business and technical graduate students together to work on an actual topic within the field. Likewise group 2 suggested inspiration from and cooperation with other faculties as a means to increase knowledge on climate change among business school students. Group 3 put weight on the necessity of educating the business school faculty staff in climate change and sustainability.

Group 9 won on a concrete proposal for practical implementation of sustainability in curriculum. A three step course involving all the classical business school disciplines would secure that students got as well hands on experience and a broader perspective and understanding of the issue. Resource Management (building a carbon management plan for a local organization), Procurement (help organization with suppliers to identify mutually beneficial carbon reduction opportunities) and Marketing Communication (Build a marketing strategy plan to communicate the efforts from previous two modules).

The Copenhagen Conference Declaration – Process

A draft version of “The Copenhagen Conference Declaration: A Call to Action for Management Education” was prepared prior to the conference by the Assistant Professor Andreas Rasche (Warwick Business School) and the Conference Advisory Board. All conference participants received a copy of the draft Declaration in their conference folders. Participants were invited to give feedback and comments to the Declaration throughout the conference through input to the members of the Declaration Task Force or via the interactive feedback system provided by ConsensusOnline. The members of the Declaration Task Force met on day 2 of the conference to discuss the incoming comments and make changes to the Declaration accordingly. The final Declaration was handed out to all participants prior to the final session of the conference. As stated in the Declaration it is a living document that leaves room for ongoing updates according to the evolution of the climate change issues and the PRME community.



The Declaration Task Force (from right):

Professor and Head of CBS Climate Strategies for Business Peter Mollgaard (CBS)

PRME Project Manager Jonas Eder-Hansen (CBS)

Director of CSR Jean-Christoph Carteron (Euromed)

Head of UN PRME Secretariat, Manuel Escudero (UN)

Professor Tony Buono (Bentley College).