

Charting a New Course

With all the societal trendlines moving in the same direction, business schools are acting to integrate sustainability into their faculty and classrooms.

Who around the world are doing the best job?

By Jeremy Runnalls



arvard Business School professor Robert Simons set off a firestorm in May when he published a paper in Capitalism and

Society called "The Business of Business Schools: Restoring a Focus on Competing to Win." Arguing that American competitiveness was suffering largely due to changing priorities at domestic business schools, Simons blamed "theory creep, mission creep, doing well by doing good, and the quest for enlightenment" as the main culprits. Taking a page from the iconic football coach Vince Lombardi, he described corporations intent on balancing the needs of employees, shareholders and customers as "unfocused, flabby, and lacking the will to win." The ensuing debate was noteworthy because it exposed how isolated this viewpoint is - not only at a business school staffed by the likes of sustainability gurus Michael Porter and Bob Eccles, but also across many other business schools around the globe these days.

Leading companies around the world are rapidly coming to the conclusion that operating a business focused solely on short-term, shareholder-driven profits will not be viable in the future. Governments and stock exchanges are tightening disclosure requirements on social and environmental indicators, while young graduates entering the workforce search for businesses that are making a positive

impact on the world. A report for the Rio+20 climate change conference last year, "Leadership in a Rapidly Changing World," interviewed top CEOs from multinational firms to determine what skills they are looking for when hiring. The overwhelming conclusion was that what's needed are business leaders who are interested in addressing global challenges when creating value for their company.

In an important institutional shift, various MBA accreditation bodies have also begun to acknowledge this new paradigm. Earlier this year, the Association to Advance Collegiate Schools of Business, along with the European Foundation for Management Development, signed a long-term partnership with the Globally Responsible Leadership Initiative (GRLI). The goal, according to GRLI director general Eric Cornuel, is to foster responsibility and sustainability in business education. "GRLI will become the armed wing of our shared ambitions at EFMD and AACSB to accelerate change," he announced in a press release.

One institution that has yet to evolve, however, is the business of business school rankings. Students examine yearly MBA rankings from top publications such as The Economist and the Financial Times to help determine which programs to attend, while companies use it for recruitment purposes. Each ranking is slightly different, but they all end up rewarding programs that place graduates in the highest-paying jobs possible. The one international ranking that focused instead

on sustainability, the Aspen Institute's Beyond Grey Pinstripes ranking, was suspended last year. It was with the intent of filling this important void that *Corporate Knights* decided to expand its annual sustainable Canadian MBA ranking globally this year.

The list of schools contacted by *Corporate Knights* was derived from the top international MBA rankings currently in circulation. The goal was to identify which of these programs – viewed as leaders in the field – are leading the pack on sustainable business education. Schools that wished to participate were sent a survey that asked detailed questions related to institutional support offered to MBA candidates and relevant student-led initiatives on campus, along with coursework dedicated to social or environmental impact management and/or non-profit management.

The Schulich School of Business at York University was the top-ranked program this year. Although strong in every category, it also managed to receive the only perfect grade in one of the three categories: institutional support. It boasts five institutes focused on everything from business ethics to building sustainable enterprises, while at least 10 professors published relevant papers in academic journals last year. Students are offered internships and consulting programs at a range of businesses focused on corporate social responsibility (CSR) and non-profit management.

In second place is the John Molson School of Business at Concordia University. Leading the way in student participa-

"I may not be the employee you want, but I'm the one my school thinks you need."

tion, the John Molson Sustainable Business Group and the Women in Business Club are some of many avenues available for MBA candidates to get involved on campus. The business responsibility oath is a voluntary student-led pledge taken by MBA graduates to commit towards the creation of value "responsibly and ethically."

The program in third place is the University of Exeter Business School. Working with the World Wildlife Fund, the One Planet MBA program was established in 2011 with the goal of producing business leaders focused on preserving our natural environment. As a result, the curriculum was the strongest found among all programs ranked.

In previous years we received some feedback in regards to our survey placing smaller programs at a disadvantage. The student participation category, in particular, rewarded institutions with larger numbers of students. Keeping this in mind, we also produced a list of the Top 10 smallest programs this year (where there are fewer than 50 graduates). The University of Exeter came first, followed closely by the American schools Duquesne University and the University of Oregon.

The results, involving programs from 14 different countries, displayed several interesting regional trends. Although Canadian schools made up three of the top five programs, the results grew more diverse further down the list. The United States had 11 programs in the top 30, followed by Britain with three. France and Australia both had two programs. The highest-ranked schools found in Asia were the Korea Advanced Institute of Science and Technology, followed by the Guanghua School of Management at Peking University. Although extensive efforts were made to reach out to more Asian programs, participation was low, making it difficult to extrapolate broader regional trends from that area.

Upon examination, there are several different methods for incorporating sustainability currently being pursued in business education. As all programs in the ranking are ones submitted for scrutiny, there is an acknowledgement that these are faculties leading the way on this new form of business education. Certainly, there are many programs that have yet to make this pivot, and that for the most part were not a part of our survey this year.

Faculties like the Desautels Faculty of Management at McGill University and the Copenhagen Business School have moved towards embracing an integrated approach to management. At McGill there is an institute specifically dedicated to developing this method of education. It is described as "one that breaks down disciplinary barriers, embraces multiple perspectives and encourages holistic, context-sensitive thinking about organizations." The institute's educational priorities are social well-being, sustainability and health.

As our ranking was originally conceived to mark traditional MBA programs that offer both core and elective courses, programs that only offered a core/integrated curriculum were disadvantaged. To allow for different methods of sustainability education, an integrated management question was added to the survey this year.

Another technique that is becoming more prevalent is an MBA entirely dedicated to sustainability. A prime example is the University of Exeter, where a previously conventional faculty was overhauled with the assistance of civil society and management experts to focus on corporate social responsibility, sustainability and non-profit education. The Audencia Nantes School of Management is currently undergoing this transition. Over the past several years, the curriculum has been overhauled so that each class dedicates a minimum of 10 per cent of its

coursework towards CSR and sustainability. Starting next year the program will be called the MBA in Responsible Management, and will be designed to "attract students wishing to follow a quality generalist MBA which places the notion of responsibility at the heart of its philosophy."

The third approach remains the most popular model, which is tweaking the existing MBA program so that sustainability is a strong element woven throughout the educational experience. Most of the schools in our ranking this year favour this strategy, including the School of Management at Boston University and the Central European University Business School. The faculty will add a handful of relevant core courses into the curriculum, to ensure that every student receives a foundation in sustainability, ethics, nonprofit management and CSR. A number of elective courses are offered for those more interested in a specific stream, such as co-operative business management, and individual professors remain the catalysts for further integration of sustainability into the program.

The report for the Rio+20 climate change conference has a timeline detailing shifting ideas about business leadership since the birth of the MBA in the late 19th century. The 1950s-1960s was the dominant period for the rational manager, while the 1990s-2000s was the era of relational leadership. The theme for the 21st century? A generation of global citizens, where shifting power structures means that success entails partnering with others to lead systemic change in society.

A cartoon in the Financial Times earlier this year showed an eager MBA candidate at a job interview. She looks across the table and tells the interviewer: "I may not be the employee you want, but I'm the one my business school thinks you need."

In other words, business education is still playing catch-up.



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Metrics

Outreach To begin the project, researchers sent an invitation for participation to over 250 of the top ranked business schools around the world. The schools were identified based on several leading rankings, including The Economist's "Which MBA?" ranking for 2012 and the Financial Times' Global MBA Ranking 2012.

Data collection and survey design The Global Green MBA Survey was distributed to those institutions that agreed to participate, and faculty members were given two months to complete the document. Schools that did not agree to participate in the study were excluded from the ranking entirely. The survey is used to collect data for the period September 2012 to August 2013.

Data cleaning and validation Each completed survey was reviewed upon

submission to verify that all questions had been answered correctly, that each response was supported with the requested links and documentation, and that the responses did not contain any obvious errors. Researchers also fact-checked the survey information with that which is available on the program website. Any missing information or issues with the survey were noted, and the document was returned to the faculty contact to make the adjustments necessary for us to proceed with the marking process. The names of each school and associated faculty were blocked out for the remainder of the marking process to avoid bias.

Scoring A list of keywords and terms was used to evaluate the relevance of each response to social responsibility and environmental sustainability. A point was allocated for each response that met the question criteria. Scores for each sur-

vey question were entered into an Excel spreadsheet and final scores were calculated based on the weighting scheme:

INSTITUTIONAL SUPPORT: 30% STUDENT-LED INITIATIVES: 25% COURSEWORK: 45%

Ranking All participating schools were ranked, with the Top 30 schools highlighted in our publication. In conducting the survey we found that smaller MBA programs were often disadvantaged by our methodology, so we decided to produce an additional Top 10 small-school list for programs with fewer than 50 graduates each year.

For more information regarding the ranking, including profiles of the top schools, visit

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Schulich Leads in Rankings Schulich is ranked in the world's top tier of business schools by *The Economist* (#16 in the world); *Forbes* (10th best non-US school); *Bloomberg Businessweek* (14th best non-US school); The Aspen Institute, a US think tank (#2 in the world in Social and Environmental Leadership); and *Expansión* (#22 in the world) in their most recent global MBA surveys. The Schulich MBA is also ranked #1 in Canada by *The Economist*, *Forbes*, The Aspen Institute and *Expansión*. The Kellogg-Schulich EMBA is ranked #1 in the world by *The Economist* and #1 in Canada by the *Financial Times* of London.

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Top 30 Schools

Rank	With 11 countries making the list, it's clear that sustainability education is more than just a fad.	Country	Faculty support	Student participation	Course	Score
1	Schulich School of Business, York University	Canada	1	3	2	89.83%
2	John Molson School of Business, Concordia University	Canada	16	1	3	80.30%
3	University of Exeter Business School	UK	6	30	1	74.27%
4	Haskayne School of Business, University of Calgary	Canada	9	17	11	70.61%
5	Nottingham University Business School	UK	8	16	12	69.29%
6	Korea Advanced School of Science and Technology	S. Korea	3	15	17	68.98%
7	Desautels School of Management, McGill University	Canada	5	24	7	68.84%
8	Palumbo-Donahue School of Business, Duquesne University	US	14	14	10	68.74%
9	Lundquist College of Business, University of Oregon	US	7	18	8	68.62%
10	Copenhagen Business School	Denmark	2	19	19	65.57%
11	School of Management, Boston University	US	17	9	16	64.83%
12	Heller School for Social Policy & Management, Brandeis University	US	30	7	5	64.62%
13	Presidio Graduate School	US	29	5	13	64.29%
14	Sauder School of Business, University of British Columbia	Canada	4	25	14	63.69%
15	École des sciences de la gestion, Université du Québec à Montréal	Canada	11	20	15	63.14%
16	Leeds Business School, University of Colorado Boulder	US	28	2	20	62.78%
17	Graduate School of Management, Clark University	US	18	26	6	62.31%
18	Mannheim Business School, University of Mannheim	Germany	12	13	25	60.31%
19	Graduate School of Management, La Trobe University	Australia	20	12	21	60.25%
20	Audencia Nantes School of Management	France	22	6	29	60.08%
21	College of Business Administration, University of Detroit Mercy	US	23	27	9	58.74%
22	University of San Francisco School of Management	US	15	11	28	58.35%
23	Guanghua School of Management, Peking University	China	24	10	22	57.64%
24	Loyola University Chicago Quinlan School of Business	US	27	28	4	57.62%
25	Rowe School of Business, Dalhousie University	Canada	10	29	18	57.51%
26	School of Management, Royal Holloway, University of London	UK	25	8	27	56.40%
27	Central European University Business School	Hungary	21	21	23	56.37%
28	International Institute for Management Development	Switzerland	19	23	24	55.93%
29	Scheller College of Business, Georgia Institute of Technology	US	13	22	26	55.78%
30	ESSEC Business School	France	26	4	30	55.53%

Top 10 Small Schools

Rank	Business schools with fewer applicants are often the first to adopt new trends in business education.	Country	Faculty support	Student participation	Gourse	Score
1	University of Exeter Business School	UK	2	10	1	74.27%
2	Palumbo-Donahue School of Business, Duquesne University	US	5	5	5	68.74%
3	Lundquist College of Business, University of Oregon	US	3	6	3	68.62%
4	Copenhagen Business School	Denmark	1	7	7	65.57%
5	Heller School for Social & Policy Management, Brandeis University	US	10	2	2	64.62%
6	Graduate School of Management, La Trobe University	Australia	6	4	8	60.25%
7	Audencia Nantes School of Management	France	7	1	10	60.08%
8	College of Business Administration, University of Detroit Mercy	US	8	8	4	58.74%
9	Rowe School of Business, Dalhousie University	Canada	4	9	6	57.51%
10	School of Management, Royal Holloway, University of London	UK	9	3	9	56.40%

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Mapping the Future of Business Education

Graduate business programs are embracing a number of different approaches when it comes to incorporating sustainability into the academic experience. Here are some of the best practices found around the world.



Canada

1. Sauder School of Business, University of British

Columbia: Offers separate scholarships for students who have demonstrated ethical leadership, are committed to the environment and have shown a passion for CSR, business ethics or sustainability.

2. John Molson School of Business, Concordia University: MBA students can specialize in corporate governance and business ethics, business sustainability and environmental management, and community development.

3. Sobey School of Business, Saint Mary's University: Established the Centre of Excellence in Accounting and Reporting for Cooperatives, which is currently developing voluntary reporting guidelines for cooperatives worldwide.

U.S.

4. Lundquist College of Business, University of Oregon: Joint degrees offered include an MBA/ MARCH (Architecture) focused on green building and development, and an MBA/JD focused on environmental law and sustainable business

5. Leeds School of Business, University of Colorado Boulder: Vibrant community of student groups including Net Impact (Gold Chapter), Social Impact Consultants, Social Entrepreneurship Group, Green Tech Group and Leeds Community Outreach.

6. Scheller College of Business, Georgia Institute of Technology: Maintains multiple endowed chairs on business ethics.

7. School of Management, Boston
University: Student
competitions include
Net Impact Case
Competition, P&G
Sustainability Challenge, MIT Clean
Energy Prize, and
Walmart Better

Living Business Plan Challenge.

Peru

8. CENTRUM Católi-

ca: Home to the Centre for Studies on Social Responsibility, Business Start-Ups and Sustainability, established in 2010.

South Africa

9. Graduate School of Business, University of Cape Town: Offers elective courses focused on sustainable enterprise, social entrepreneurship and applied responsible investments.

10. University of Stellenbosch Business School: Numerous faculty members also support TSiBA, a non-profit business school that provides free tertiary education for students from disadvantaged communities.



Australia

11. La Trobe Business School: Multiple research

Multiple research centres focus on water scarcity issues in Australia, the Centre for Water Policy and Management, along with the Murray-Darling Freshwater Research Centre.

12. Griffith Business School, Griffith

University: Extensive published faculty research on indigenous resource rights, social and environmental accounting, sustainable tourism and corporate social responsibility.

Lebanon

13. Olayan School of Business, American University of Beirut: Faculty currently developing a readymade roadmap for any Lebanese startup NGO or any existing NGO that is looking to remodel its operating apparatus.

China

14. Guanghua School of Management, Peking University: Outstanding MBA performers in a forum on impact investing were given money to invest in community projects, in which they later became board members.

Korea

15. Korea Advanced School of Science & Technology: The school has hosted 68 seminars, external speakers and conferences in past year related to social and enviro management.

Britain

16. University of Exeter Business School: Students take at least 12 required courses entirely dedicated to social and/or environmental impact management.

France

17. Audencia Nantes School of Management: Each course offered by the faculty is mandated to dedicate at least 10% of its content to sustainability and global responsibility.

Germany

18. European School of Management and Technology: Full scholarships offered to students from developing countries with goals to further the sustainable development of their home countries after graduation.

Netherlands

19. TiasNimbas Business School, Tilburg University: Business school includes a number of endowed faculty positions focused on sustainability, including chairs in Globalization & Sustainable Development, Cooperative Entrepreneurship, and Governance and Sustainability.

Denmark

20. Copenhagen Business School: Each MBA student is required to act as a consultant to one or two social entrepreneurship companies every year.

Lines in the Sands

Under no illusion they'll bring the likes of ExxonMobil to their knees, students around the world are pushing universities to take a symbolic stand by divesting from fossil fuels.

_{ву} Shawn McCarthy



A movement is growing in the halls of academia and spreading into city councils and churches.



ampshire College has a long history of putting its money behind its progressive principles, serving in the vanguard of various divestment movements.

A 1,400-student liberal arts college in the western Massachusetts town of Amherst, Hampshire was the first college to divest from apartheid South Africa in 1977,

and its board of trustees voted in 2009 to no longer invest in companies seen as supporting Israel's occupation of the West Bank.

Now, the school is employing its \$33 million endowment fund to send a message on climate change, approving an investment policy that shuns fossil fuel producers and aims instead at supporting the growing clean energy sector.

Hampshire is among a growing number of colleges, municipalities and religious institutions in the United States that are backing a "fossil free" campaign mounted by 350.org, the American environmental organization that has targeted Canada's oil sands as a particularly carbon-intensive source of fossil fuel and organized rallies against the planned Keystone XL pipeline which would deliver Canadian bitumen to the Gulf Coast.

But the fossil-free movement is about more than oil sands, or even coal. Activists are targeting the top 200 oil, natural gas and coal producers in the world, including industry giants like Exxon-Mobil, BP and Royal Dutch Shell. The list includes Alberta-based producers like Suncor Energy and Canadian Natural Resources.

The movement now has activists working on campuses and in cities, hoping to replicate the South Africa divestment effort that was seen as an important contributor in the anti-apartheid campaign, ultimately helping drive that country to majority rule.

Jonathan Lash is president at Hampshire College and a former president at World Resources Institute, a non-governmental organization in Washington, D.C., that focuses on sustainable development. He says Hampshire's decision to amend its investment policy pre-dates the 350.org effort, but the college has since signed on to the campaign.

"We're not going to bring Exxon to its knees," Lash said in an interview. "But we try to act based on the values that are important to us and then make case by case determinations as we are investing." The approach is about embracing as much as rejecting. "We try pretty hard not to just make it a negative screen but to affirmatively look for positive opportunities [in clean energy]," he added.

Lash said the college is pursuing divestment as a complement to actions it is taking on campus to lower its greenhouse gas emissions, including increasing reliance on solar and ensuring new buildings have zero-emissions designs. And he said the divestment is as much symbolic and political as it is financially motivated.

"Scientifically, we know what the problem is; technologically, we have the solutions, but politically we haven't found a way to move forward to adopt the decisions . . . This discussion puts a set of interests that seem to run contrary to society's interest at centre stage, and that is a good thing."

Jamie Henn, campaign coordinator with 350.org, acknowledged it will take many more members before the fossil fuel industry feels any impact from the divestment movement, though a commitment from a school like Harvard University – with its \$30.7 billion endowment – would be significant.

"Divestment is a strategy that allows us to really go after the fossil fuel industry as a whole and bring a kind of moral clarity to it as it did during the apartheid era," Henn said. "If it is wrong to wreck the planet [through carbon emissions], then it is also wrong to profit from that wreckage."

There are now activists working on divestment campaigns at more than 300 campuses across North America, Europe, Australia and New Zealand. It has spread to municipalities – primarily west coast cities and college towns – and the faith community, which has long been involved in ethical investment strategies.

The movement also highlights the risks of remaining invested in fossil fuel companies that may be overstating the value of their oil, gas or coal reserves heading into a carbon-constrained future.

The concept of "unburnable carbon" has spread since the International Energy Agency reported in 2012 that nearly a third of current fossil fuel reserves would have to remain in the ground if the world was to avoid the worst impacts of climate change.

"We've seen the divestment campaign has been a real vehicle to carry that discussion forward," Henn said. For student activists, divestment is a concrete measure that they can pursue in their own community on campus. Chloe Maxmin, a junior majoring in social studies at Harvard, was a co-founder of the divestment committee there a year ago and has already seen progress. Last school year, the student body at Harvard College approved a referendum by 72 per cent, demanding the school's endowment fund divest from the top 200 fossil fuel companies and reinvest in socially responsible funds.

Student government adopted that vote, and Maxmin's committee is now holding a series of meetings with the university's administration.

Maxmin acknowledged that Americans have little choice but to continue using fossil fuels. But she said the long-term goal is to redirect capital away from companies that produce GHG-emitting fuels toward renewable energy companies that will facilitate the transition.

She pointed to research that suggests investors can shift from fossil fuel producers without undermining their returns, a key issue for endowment funds and other large investors that have a fiduciary duty to maximize their return on investment. "In general, divestment is not going to majorly impact the endowment," she said.

Harvard's massive endowment is invested in a broad range of hedge funds and mutual funds, venture funds, and trustees have told the committee that divestment would create major losses. However, they are willing to discuss an effort that focuses on the direct investments the endowment fund has made in the top 200 fossil fuel producers.

One positive outcome came in late July, when the manager of Harvard's endowment announced it had created the new position of vice-president of sustainable investing. In that role it hired Jameela Pedicini, who was investment officer for global governance at the California Public Employees' Retirement System (CalPERS). One component of Pedicini's job will be to explore partnerships related to environmental, social and governance investing.

Momentum is also gathering on Canadian campuses. The effort was launched by the Canadian Youth Climate Coalition, which has now joined forces with 350.org and was expecting to have at least 20 chapters across the country this fall.

At McGill University in Montreal, the divestment committee has won the support of the student government and

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a number of faculty groups. The social investment committee of the board of governors said climate change does not fit into its criteria of avoiding investments that result in social injury, but the students have vowed to rework their submission and try again.

"The group at McGill is gearing up to really continue to build momentum on campus and turn up the heat this fall," said Cameron Fenton, national director of the Canadian Youth Climate Coalition and organizer of the campus campaign.

One potential downside of the divestment movement is the elimination of shareholder activists from the corporate governance process of the fossil fuel companies, which routinely face resolutions at annual meetings to clean up their practices.

But Fenton said shareholder activism only goes so far when you're challenging not just the way a business operates, but the nature of the business itself. "It fails to meet the need when we're talking about divestment around climate change and fossil fuels," he said. "Divestment is really taking that hard-line, moral stand that the business model of these companies is fundamentally at odds with the interests of society."

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Graduating? Time to Find a Job

The good news is that growth in "green" careers is outpacing the rest of the job market. With so many options now available, the challenge is in choosing.

By Angie Knowles



or university graduates, there has never been a better time to work in sustainability. A growing body of research demonstrates that sustainability-related jobs have increased at a

faster rate than total jobs in the overall economy, while at the same time weathering major market fluctuations.

These jobs are not only growing — they are also increasingly diverse, with multi-faceted roles that encompass everything from corporate strategy development to natural resource management and regulatory compliance.

Ironically, this recent job proliferation has created a unique challenge for job-seekers. New professionals are now faced with a daunting variety of sustainability careers. They know the jobs are out there, but they lack adequate information on in-demand careers or required skills. Without a clear map that links jobs with relevant education and training, these prospective workers have a tough time effectively planning for careers in sustainability.

Responding to this need, a number of new Canadian and American studies have started to bridge the knowledge gap. These reports explore the demand for sustainability careers, while also delving into required skills, typical salaries and common fields of study.

Most of this market research features strong themes of job growth and variety. In their research of the West Coast's clean economy, GLOBE Advisors and the Center for Climate Strategies arrived at a conservative estimate of at least 508,000 full-time, direct production jobs. Similarly, Environmental Careers Organization (ECO) Canada found that over 50,650 Canadian professionals spend 50 per cent or more of their time on work activities related to environmental or social sustainability.

While sustainability jobs are widespread, they are especially concentrated in the American and Canadian west, with regions like California, Oregon, Washington, British Columbia

and Alberta accounting for a high proportion.

Among these jobs, ECO Canada's study identified seven top career paths: chief sustainability officers (CSOs), sustainability specialists, officers, researchers, educators, consultants and trainers. Sustainability specialists are particularly in high demand, with over 34,450 working in this role in Canada.

Many of these careers also pay decent



Sustainability practitioners need diverse, well-developed skills to succeed. But how do they build these competencies?

salaries. In GreenBiz Group's 2013 "State of the Profession" report, a panel of American sustainability managers earned median salaries of around \$112,500, with higher salaries in health care and automotive industries, and lower ones for service providers and real estate firms. Their Canadian counterparts earned similar pay, with average starting salaries over \$53,000 for four out of the seven top sustainability careers.

Sustainability careers often pay well because they require considerable education and experience. GreenBiz found a strong correlation between compensation and education in its report: only 12 per cent of sustainability managers with a bachelor's degree earned more than \$100,000 in the United States, compared to 39 per cent of managers who had a master's degree. Similarly, 68 per cent of Canadian sustainability profession-

als held at least a bachelor's degree, while 55 per cent also possessed at least eight years of professional experience.

In addition to this education, sustainability professionals also need extensive work experience. Many of the practitioners in ECO Canada's report supported multiple departments and led vital company activities related to managing risk, increasing returns on capi-

tal, and stimulating business growth. These professionals needed skills in interpreting environmental regulations, implementing sustainable development programs and partnering with stakeholders.

American sustainability professionals have a similar work scenario. In the GreenBiz study, sustainability VPs, directors and managers carried essential responsibilities in strategy development, reporting environmental data, leading cross-functional teams and educating employees. These practitioners relied on solid business acumen, a willingness to learn about a wide range of issues, and an exceptional ability to serve as both sustainability "translators" and collaborators.

Sustainability practitioners clearly need diverse, well-developed skills to succeed, but how do they actually build these competencies?

For both American and Canadian practitioners, the most popular field of study is business or public administration, followed by physical or life sciences, engineering and social sciences. Sustainability consultants are one exception to this general rule – only 4 per cent held a business-related degree in ECO Canada's report, while 41 per cent had studied biology, chemistry or environmental sciences.

Graduate degrees can also make a difference. According to Net Impact, recent MBA graduates felt this program increased both their employment options and the likelihood of finding a job that aligned with their values.

Armed with vital insights on sustainability careers, new professionals can look at the wealth of job options and feel empowered, not intimidated. Sustainability work will continue to expand into new and exciting areas, so there's no better time to take the leap.





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Sustainability and the Classroom

When it comes to teaching environmental and social responsibility, schools are relying on students to do the heavy lifting.

_{ву} Jon-Erik Lappano



t's been two years since I left my post at *Corporate Knights* to pursue a career in environmental education.

Today, as program manager of EcoMentors, the environmental youth leadership program established by Earth Day Canada (EDC), I work with people between the ages of 14 and 25 who have no shortage of ideas to change the status quo.

The energy and ingenuity of young generations has carried me to peaks of optimism in the bipolar emotional terrain of the environmentalist. For now at least, it looks to me that our hopes of someday getting this right aren't yet vanquished.

Admittedly, I'm looking out from inside an oasis. The youth I work with are outliers championing environmental and social sustainability to their peers and the community.

Their biggest limitation, contrary to popular perception, is not apathy. Rather, it's a model of education in Canada and the United States that doesn't empower them to take action; it's an institutional structure that offers little guidance on how to carry a sustainability mindset into a future career. What skills are needed? What post-graduate programs are available? What kind of jobs can be pursued that allow an individual to make a positive change in the world?

As Simon Jackson, founder of the Spirit Bear Youth Coalition, tells me: "If today's youth are given a positive and tangible opportunity to take a stand for nature, major progress can be made towards sustainability."

But without the proper institutional support, their ideas are at risk of burning out. Which is why programs like EcoMentors or Jackson's new international campaign, CoalitionWILD, are striv-

ing to provide platforms for bringing youth-led sustainability solutions "from dream concepts to reality."

The impetus is there. Young people are connecting in great numbers at events like EDC's Beyond Green Youth Summit, organizing at pivotal Keystone XL and divestment rallies across the U.S., and courageously leading grassroots movements such as Canada's Idle No More.

Still, despite this increasing engagement, sustainability is barely addressed in the formal curriculum outside of a few modules in a biology or geography course.

Jayden Rae is a high school student and founder of the Whitby Environmental Youth Alliance in Ontario. She has grown frustrated with schools' inability to educate for sustainability.

"The curriculum is outdated and limits teachers' ability to teach students about current issues," she says. "Most lesson plans are based on events or issues of the past when it's more important to be considering the future."

Her recommendations on how it could be improved are noteworthy.

"We need to get outside of the classroom to learn about sustainability," Rae says. "Teachers need to make real life connections to what it's all about so we can understand how it impacts us now and how it will in the future."

The non-profit organization Learning for a Sustainable Future (LSF) seeks to accomplish exactly this, working with students, educators and administrators to create a model of education that uses experiential learning across subjects.

"The current method of education has prevented students from exploring and understanding the interconnectedness of these complex issues," says Angela Kielbowski, project coordinator at LSF. "Sustainability, by its nature, is interdisciplinary – so it requires interdisciplinary education to understand it."

In the U.S., the Center for Ecoliteracy in Berkeley, California, is leading the way on embedding sustainability into the classroom within the K-12 range through active consulting, complementary resources and a national food reform program in schools. Its guiding principles reflect a need for what it refers to as a "systems perspective" in the classroom.

To deal with what it calls a "host of pressing and often escalating issues" the center stresses that students need to understand "the patterns of relationship that connect them."

Until schools deal seriously with sustainability in such a way, they are relying on students to make the necessary connections.

Of course this is not unique to high schools. As students enter the post-secondary system it's also common to encounter a lack of dialogue or research across academic borders.

Blair Feltmate, associate professor at

the University of Waterloo's School of Environment, Enterprise and Development (SEED) and chair of Climate Change Adaptation Project Canada, echoes Kielbowski when he tells me an interdisciplinary approach is our best hope at adapting to climate change.

Unfortunately, he says, that kind of skill set is "virtually non-existent" in corporations and most research.

"We're lacking broad-based generalists who can look at climate change from multiple angles and perspectives," says Feltmate. "We still need a specialized depth of analysis – but we've unfortunately got a system that favours the specialist at the expense of the generalist."

Tyler Hunt, project coordinator at the University of Toronto St. George campus sustainability office, tells me that in addition to an interdisciplinary effort by the institution, many collaborations and initiatives are happening at the student level.

"There has been a significant growth in environmentally-focused student clubs and groups organized across disciplines," says Hunt. "There is a strong beekeeping group who produces honey, a campus ag-

riculture group that uses vacant spaces on campus to grow produce, a student-run food co-op cafe that sells local and organic food — and that's just the tip of the iceberg."

He is eager to illustrate the student-driven initiatives on campus, and I completely identify. When looking for hope in this space, I've also seen it most prominently in the hearts and minds of groups he is describing. But Hunt's final metaphor has me thinking, because it may be more apt than he intended. Icebergs melt. They calve off from receding ice-sheets and take shape as dynamic marvels. While they impress and inspire onlookers, they are heading into waters they can't possibly endure alone.

What we need, it strikes me, is an amassing of glaciers – an accumulation of energies that if supported by a solid base will eventually reshape the lay of the land.

If our schools could commit to dealing with sustainability as an interdisciplinary and deeply embedded subject right from the start, it might just provide that platform youth need to carve out a new course.

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