CHAPTER

Universities: serving as, and educating global Citizens

Heather Munroe-Blum and Carlos Rueda*

GLOBAL CHALLENGES AND GLOBAL CITIZENSHIP

our years ago, in Sydney, Australia, 2.2 million citizens turned their lights off for one hour to take a stand against climate change. Last March, only four years later, 5,251 cities in 135 countries responded to the same call and turned their lights off for "The Earth Hour", including places such as the United Arab Emirates, Bolivia and Palestine (Earth Hour, 2011). The symbolic action of "The Earth Hour" has become the world's most engaging climate change initiative.

Today, almost every person who has been exposed to the concept of climate change is able to tell a story, show a video or state a fact relating to the impact of climate change. They are realizing that national or regional boundaries, the same ones that define an important part of social identities and loyalties, do not matter in the dynamics of climate change. They also see themselves as part of the problem, and of the solution. According to a poll conducted among 25,000 people in 23 countries, the most serious global problems are: extreme poverty, the environment or pollution, the rising cost of food and energy, the spread of human diseases, terrorism, climate change, human rights abuses, the state of the global economy, war or armed conflicts, and violation of worker's rights (BBC, 2010). The different local and global responses to these challenges, such as the "The Earth Hour" movement, reveal strong supranational feelings of unity and responsibility, the two drivers shaping our identity as global citizens.

The reactions towards those global challenges, together with the revolution in technology and communications, are distinctive characteristics of young citizens. Holden Thorp, President of University of North Carolina at

Chapel Hill, and Buck Goldstein refer to "the millennial generation" in their book *Engines of Innovation*:

They were born between 1981 and 1993... Approximately 40% of millennials in America are non-white, and 20% have a parent who is an immigrant. Eighty per cent have participated in some form of community service, and they are generally optimistic about the future... [Also] they generally think of themselves as entrepreneurial. Ninety seven per cent of them own a computer and 94% own a cell phone; 76% use instant messaging to stay connected 24/7 (Thorp et al., 2010, p. 15).

Referring to their problem solving capacity, the authors note:

The demographic diversity... as well as their standards of intellectual achievement, technological facility, social commitment and entrepreneurial outlook, make them ideal partners in attacking great problems in a practical and timely manner. Their strong idealism combines with an increasing interest in what has come to be known as social entrepreneurship to create an important and influential constituency ready to engage the world's most challenging and exciting issues (2010, p. 15).

The challenge for universities is clear. How should universities respond to global challenges? How should universities adapt to educate "the millennial generation" as global citizens? In sum, how are universities — institutions that were founded to resemble "the universe", "the whole", "the world" — behaving as global citizens?

In 2007, the Glion Colloquium gathered to discuss *The Globalization of Higher Education*, compelling examples and strategies to create "universities in the world and of the world" (Duderstadt, Taggart & Weber, 2008, ch. 24). Four years after, written in the context of the 2011 Glion Colloquium on *Global Sustainability and the Role of Universities*, the current article aims to concretize seven directions in which universities can fulfill their role as global citizens. These directions are presented without a specific order, and some of them illustrated with examples of programs and initiatives at McGill University, a highly global, research-intensive and internationally interconnected research university, and its Desautels Faculty of Management — one of the university's highly internationalized and innovative communities.

Active engagement in global considerations

Are universities effectively engaging with global considerations, such as climate change? As example, a quick Google search with the words "climate change research center", identified more than 50 university-based centers or institutes devoted to research on climate change, and there is only in the English-speaking world of Google. Yes. We can be confident — universities are engaging with global challenges.

As universities sharpen their focus on addressing world problems, they are naturally doing so via new research-oriented multidisciplinary programs that foster collaboration, drawing on their current institutional assets. But university leaders might question their activities and priorities more deeply in the context of their role in addressing global challenges. As Harold Shapiro (2009), former President of Princeton University, notes:

In order to meet their obligations as a public citizen in the educational arena, universities need to constantly and transparently reevaluate whose interests are being served by the current policies and programs that surround the provision of their educational programs. [And universities need] to raise questions that society does not want to ask and to generate new ideas and understandings that help us invent a better future, at times even pushing society toward it.

We suggest two ways in which universities might engage more deeply. One, by embracing research and knowledge translation on global challenges that might not be receiving attention by other institutions or sectors. As an example, to what extent are universities engaging with post-disaster reconstruction, nuclear risk, health systems research, international financial regulation or business ethics? Two, by adapting university educational activities in response to global challenges. To what extent are universities educating and training people to understand and take effective action in relation to problems, such as these above?

McGill University, with students and faculty from every continent of the world, has made global health a priority. For example, significant research, policy, outreach and training activities in this field are channeled through the Institute for Health and Social Policy. Researchers at the Institute actively approach health considerations from a global perspective: briefing the United States Congress on the benefits of maternity leave around the world, or raising awareness of the impact of HIV/AIDS on the ability of African families to provide for their children. On the educational side, the International Masters in Health Leadership (IMHL), a joint program of the Faculty of Medicine and the Desautels Faculty of Management, is uniquely designed to give practising physicians, nurses and other health professionals effective engagement with the manner in which health care is organized in jurisdictions around the globe, and to support them in the implementation of change projects with teams inside and outside their organizations or communities, while learning from their experiences. In the words of IMHL Faculty Director, management professor Henry Mintzberg (2011): "The IMHL is unique and highly ambitious. We are setting out to change, not only education for health leadership, but the health system itself, by bringing into an ongoing forum the best of practising leadership from all aspects of health and from all regions of the world." The latest class graduated health professionals from 13 countries, including Uganda, Saudi Arabia, Italy, Iceland, England, the Philippines and Belgium.

Universities are positioned to actively engage global issues through interdisciplinary research platforms and innovative educational programs.

Transnational and connected research

In the last few decades, the development of regional clusters, modelled worldwide after the success of Route 128 in Massachusetts and Silicon Valley in California, has been a cornerstone innovation in economic policy. According to Richard Florida (2008), 10 mega-regions, which together have only 6% of the world's population, "account for 43% of the planet's economic activity and more than half of its patented innovations and star scientists".

Highly effective clusters have seen government, industry and universities working on shared goals in a three-way partnership — what Stanford professor Henry Etzkowitz (2008) calls the "triple helix" model — and then applying this on the world stage. It is clear that, in order to have impact in a field today, the best strategy is still to assemble a critical mass of smart people in your own backyard. However, serious players in the R&D game connect their clusters to others.

Since 2006, key partners in Canada and California have been working together to pioneer a new type of large-scale international framework, one that networks government, industry and universities in both locales — a "double triple helix". This Canada-California Strategic Innovation Partnership (CCSIP) is an entrepreneurial collaboration among the three sectors in innovation-intensive research areas, such as sustainable energy and bio-imaging technology. This "double triple helix" strategy is a promising model for future research partnerships, taking a proven regional strategy and globalizing it. It uses shared priorities and strengths to quickly identify, and act upon, critical research questions that align with industry and community needs (Munroe-Blum, 2008, pp. 157-8).

When identifying partners, geographic proximity is typically a feature of economic clusters. Nevertheless, with respect to research and innovation clusters, universities can act globally. The increasingly competitive research and innovation performance of the BRIC countries (Brazil, Russia, India and China) demonstrates globalization and virtual clusters of research, innovation and talent (Munroe-Blum, 2010).

- In 2006, the BRIC countries produced half as many doctorates as all 30 OECD countries combined (OECD, 2009, p. 17).
- All the BRIC countries tripled their production of scientific articles in just over a decade (OECD, 2010, p. 45). In 2007, China also took the #2 spot — surpassing Japan — for volume of research articles published (National Science Board, 2010, pp. 0-9).
- In a survey of global firms planning to build new research and development facilities, 77% plan to build or are building them in China or India (The National Academies, 2010, pp. 6-11).
- China and India, also, have developed new products that are dramatically cheaper than their western counterparts: \$2,500 cars and \$100 computers.

The time when non-Western scientists had to partner with prominent Western scientists before achieving international acclaim is over. In the coming years, we are likely to see the situation reverse.

In our globalized world, one of the most important roles of universities is, and will be, forging international connections. Contemporary research and scholarly collaborations often demand a scale so massive, so daring, and requiring such a wide range of expertise, that it will increasingly be impossible for any single institution, organization or industry to assemble the necessary talent and infrastructure to tackle these on their own. And, perhaps most importantly, these establish networks of key players — the organizations and people that, when brought together, are most likely to jumpstart innovation.

Universities will benefit from connecting their research activities to intersectoral, international clusters of innovation, with a special emphasis on including one or more partners from the BRIC economies, where there exists a natural complementarity or synergy.

Open knowledge that flows

Initiatives that promote open knowledge are clashing with current property rights frameworks. Google's Library Project (2011) is an example of such an initiative, which it defends as follows:

Copyright law is supposed to ensure that authors and publishers have an incentive to create new work, not stop people from finding out that the work exists. By helping people find books, we believe we can increase the incentive to publish them. After all, if a book isn't discovered, it won't be bought. That's why we firmly believe that this project is good news for everybody who reads, writes, publishes and sells books.

Out of the 21 library partners in this Google initiative, 15 are universities. Universities contain knowledge in their libraries, but are also very active in the creation of knowledge for teaching and research purposes, thus, the same principle of information flow might well be applied to these latter activities and outputs.

MIT is at the frontier in their effort: OpenCourseWare (OCW) a free web-based publication of virtually all MIT course content given by almost 700 faculty members, with approximately half of the materials already translated into other languages (MIT OCW, 2011). This is achieving global impact. An estimated 100 million people use the source, with the majority of users outside the United States. As part of the initiative, more than 250 universities from around the world now share their educational content. OCW materials have helped educators in Indonesia improve their courses, entrepreneurs in Haiti launch their businesses, and students in Africa study with the confidence that they are accessing current, accurate information. The initiative aims to reach 1 billion minds in the next decade.

Initiatives such as Google's Library Project and MIT OCW use open flows of knowledge to have a positive global impact, and these demonstrate the leading role that universities play in this effort.

Achieving the right balance between closed and open IP is an acute problem for some key economic sectors. Currently, strong IP protection is framed as the only way to recoup major investment in a necessarily long and costly development process, yet that walling-off of knowledge may be, in part, the very reason that, for example, the number of new drugs created in recent years has fallen so dramatically. At universities, the traditional enclaves of closed IP — patents, licences, contracts and associated streamed income — have been viewed as effective means to monetize the impact of knowledge. But the new innovation era demands expanded notions of "technology transfer", models that support open innovation. To increase the impact of research and teaching on global considerations, all players in the innovation system must interact proactively to build trust and productive collaboration.

Universities can lead a reform of current IP constraints and act boldly in opening their knowledge to global use and applications.

Co-educate in global partnerships

The higher education sector is booming, especially in the developing world.

- In 1970, 28.6 million students were enrolled in tertiary education; in 2007, 152.5 million students were enrolled, a five-fold growth (UNESCO Institute for Statistics, 2009, pp. 9-10).
- In 1980, people from developing Asian economies accounted for 14% of the people who completed tertiary education worldwide. In 2000, those same countries were home to 25% of degree holders (National Science Board, 2010, pp. 0-6).
- In China, the number of people graduating from universities and specialized colleges has nearly quadrupled since 2000 (UNESCO Institute for Statistics, 2009, pp. 9-10).

These educational trends respond to demographic and economic changes, and aggressive educational policies taken by developing countries to supply the increasing demand for higher education. Universities from developing and developed countries may look more ambitiously to build co-educational partnerships with the goal of increasing the quantity and quality of higher education.

The need for a truly global education is another motivation to build international partnerships. Universities that move away from international educational experiences as "bubble programs", where students are sheltered from the character and people of the very places they are visiting, to find the means in which to co-educate students in partnership between schools form different

countries will have greatest impact. Business schools, in particular, may be setting the benchmark for other disciplines. Among the top 25 business schools in the world (*Financial Times*, 2011), at least 10 of them offer an MBA degree in partnership with another international school. In seeking to co-educate in global partnership, one of the main challenges for universities' senior administration and faculty will be to overcome the vicious circle of defining themselves as "elite" institutions, that should only "educate elites" among other "elite universities", with "elite" narrowly defined.

The International Master in Practicing Management at McGill University is a partnership of 5 business schools (in Canada, U.K., Brazil, India and China). The five schools train a common cohort of managers with a common, innovative learning framework developed collectively. In each country, each school is in charge of one of the five modules and delivers it with their own faculty and resources. Such opportunities can provide students with a rich global experience.

Universities can offer students the opportunity to be equally co-educated by schools from other countries and cultures, as one means of implementing global education.

Social entrepreneurship with local and global impact

The history of many universities is linked to an entrepreneur. McGill University, for example, was founded on the vision and generosity of James McGill, a Scottish immigrant merchant who, in the 1700s, came to the land that would become Canada. We can find similar origins in Cornell University, Johns Hopkins University, the National University of Singapore and the Instituto Tecnológico de Monterrey.

Entrepreneurship is in the DNA of the university, making our institutions great places for the attraction of talent with a hunger to test new ideas. Nevertheless, it must after be stimulated and rewarded. As Thorp and Goldstein note (2010, p. 20):

Don't the smartest people in our society gravitate toward academic communities? Isn't academia known for discovering new ways of doing and seeing things? Didn't the World Wide Web get started to foster knowledge sharing among academics, and wasn't social networking (the newest form of knowledge transfer) invented by undergraduates on a college campus? And in terms of resources, what institutions on our society have more financial resources dedicated to attacking the world's big problems? There is obviously something missing in the mix, and we believe, as you might expect, the missing ingredient is entrepreneurship.

Entrepreneurship, in the university context, includes the transfer and application of the knowledge and technology that flow from university research. But it does not stop there. It means, for professors and students,

bringing the energy and expertise of universities to bear on problems that have an impact on society: for example, creating and evaluating a more effective biomedical device, sharing advice with policymakers in societies transitioning to democracy, or helping communities devise sustainable solutions to nutrition problems, and doing so via creative new approaches to teaching and learning.

Teach for America (TFA) was founded by Wendy Kopp in 1989, a Princeton University student, and emanated from her senior thesis on how to help eliminate educational inequity in the United States. TFA now recruits new college graduates and professionals, "TFA corps", to teach for two years in urban and rural communities throughout the United States. The goal of TFA (2011) is to impact students' performance via the work of TFA corps members, and to develop the members into lifelong leaders who will work towards educational equality. Since the beginning of the program in 1990, more than 20,000 corps members have fulfilled a commitment to TFA, and the organization has become one of the most desired employers in the United States and in 18 other countries where the network Teach for All has expanded to include U.K., Germany, Brazil, China, India, Israel, Lebanon and Pakistan. And it all started with the thesis of a senior college student.

The Jeanne Sauvé Foundation and McGill University annually host a group of accomplished young leaders from all around the world: The Sauvé Scholars. Financially supported by the Foundation, they live together in The Sauvé House, have McGill mentors and almost unlimited access to McGill and Concordia University courses, and take advantage of those resources and time flexibility to work on their projects during one year. One of the Sauvé Scholars, Arcie Mallari, from the Philippines and the founder of Silid Aralan, an educational NGO working with underprivileged school low-performers, was inspired through the Sauvé program to address the challenge of waste management for future generations. Mallari is launching iWastology, a web-based tool to raise awareness on the issue of garbage production through the eyes of schoolchildren from varying communities around the world. To date, there have been 100 Sauvé Scholars on the McGill campus, launching outstanding ventures to tackle global problems in their own countries and communities.

We can help to grow the entrepreneurial spirit within our universities, encouraging students and professors to act on their ideas and connect with partners and resources to effect social change.

Leadership style rooted in communities

McGill's Henry Mintzberg described the last financial crisis (2009, p. 1):

Beneath the current economic crisis lies another crisis of far greater proportions: the depreciation in companies of community — people's sense of belonging to and caring

for something larger than themselves. Decades of short-term management, in the United States especially, have inflated the importance of CEOs and reduced others in the corporation to fungible commodities — human resources to be "downsized" at the drop of a share price. The result: mindless, reckless behavior that has brought the global economy to its knees.

This phenomenon not only highlights a "leadership crisis", but also points to the emergence of a new way of understanding change and the management of organizations. Barack Obama's 2008 presidential campaign was a milestone in animating a new style of leadership. In the words of Marshall Ganz (2008, p. 16), Harvard Kennedy School Professor and key trainer of organizers during the campaign:

Social movements' nature, as broadly based harbingers of change, create unusual leadership challenges: they are voluntary, decentralized and self-governing; they are volatile, dynamic, and interactive; participants are motivated by moral claims, but results depend on strategic creativity; and their capacity to make things happen depends on their ability to mobilize broad levels of commitment. As a result, perhaps their most critical capacity is consistent — formal and informal — leadership development. [The campaign] combined large-scale training organizing skills and, at the same time, developed innovative new media techniques to support the organizers and their local leadership teams in putting those skills to work.

Or what Mintzberg calls Communityship:

Communityship requires a more modest form of leadership that might be called engaged and distributed management. A community leader is personally engaged in order to engage others, so that anyone and everyone can exercise initiative. If you doubt this can happen, take a look at how Wikipedia, Linux, and other open-source operations work (2009, p. 2).

Organizations work best when they too are communities, of committed people who work in cooperative relationships, under conditions of trust and respect. Destroy this, and the whole institution of business and other organizations collapses (2010, p. 1).

This same revolution in leadership and management is also challenging traditional approaches to education, which have been based on classroom learning, to a new engagement in learning *within* organizations and communities, and moving into a "mutual learning" framework.

At McGill, the International Master in Practicing Management and the International Master in Health Leadership programs were conceived with a community approach for learning and organizational change. Each participant designated a team of colleagues who will do the program with him/her virtually, both to anchor the learning and to assess its consequences. This

team debriefs on the learning after each module; welcomes guests to the managerial exchange and field studies; and together with the participating manager, promotes change in the organization as a result of this learning. This approach leverages the activity: for each in-person participant in the program, five or more people are trained virtually, multiplying the impact on the organization (Mintzberg, 2011).

University education may increasingly be reciprocal and community-based, and less dependent on the professor as "leader-expert".

Intercultural intelligence, empathy and courage

Globalization, in its many economic and social expressions, has resulted in a smaller world. For some cultures, as mentioned previously, this creates a comfort with global identity. For others, it represents a threat to traditional beliefs and life styles, awakening feelings of protectionism, tribalism and aggression. As Samuel Huntington (1993) in his article, *The Clash of Civilizations*, noted, cultural and religious differences will increasingly be a main source of conflict, requiring humans to develop enhanced capacity to coexist together. Indeed, civil conflict and war, paradoxically, may be triggered more readily with the pressures of globalization, as 9/11 and subsequent events have shown.

Thus, as the world is increasingly interconnected, for some it becomes smaller and intimidating. Global citizenship will require three important individual qualities: intercultural intelligence, empathy and courage.

Intercultural intelligence refers to a person's capacity to adapt to and effectively interact with new cultural contexts. It requires from an individual: the capacity and interest to gain knowledge about a new culture, the will and commitment to persevere in comprehending and engaging with the new culture, and transcending stumbling blocks such as disappointment or fear into the ability to engage effective action in a given intercultural situation (Early, Ang & Tan, 2006).

Empathy towards those who are "different" can assist people to turn feelings of indifference towards or fear of the "other" into compassion and involvement, resulting in understanding and positive connections. In the context of an increasingly connected world, empathy is the core to feelings of unity and shared responsibility and, together with multicultural intelligence, the distinguishing elements separating "international" from "global" citizens.

For centuries, humanity has built institutions responding to national, local and individual interests, and an important part of our loyalties, identities and emotions have been attached to a domestic mission. However, problems of global scope will not be resolved by citizens and institutions borne of limited and local perspectives and mission. A sense of adventure and courage may be necessary to foster adaptive change. Courage here does not mean aggression.

In the exercise of global citizenship, one's courage can be viewed as the ability to challenge one's own personal institutional and cultural perspectives and norms to embrace broader global norms and perspectives and to persevere in that effort of developing global citizenship. Indeed, both local *and* global engagement need not be mutually exclusive but, rather, mutually constructive.

University education, as a key element of institutional mission, is generally structured within the context of disciplines that pursue facts and knowledge, potentially under-focusing on the equally important personal learning associated with intercultural intelligence, empathy and courage (and multilingualism), characteristics that will be key for graduates that are successfully prepared to perform global tasks. The Economist Intelligence Unit's CEO Briefings (2006, 2007), based on survey data from over 1,000 senior executives across 40 nations, identified a lack of high quality talent to operate in multiple cultures as the greatest challenge facing international organizations. How can universities foster these qualities? Apart from co-educating in global partnerships, another key direction is to create environments that embrace and interact on a base of diversity, including intellectual, linguistic and demographic diversity.

McGill's Desautels Faculty of Management is located in downtown Montreal's multilingual, multicultural environment. Two-thirds of the school's faculty members come from abroad; each year, 75% of PhDs, over 50% of MBAs, and 25% of Bachelor students also come from countries other than Canada. With such diversity of experience and culture, the school's curriculum and environment naturally reinforce an understanding of global issues, with several new programs created specifically in support of that aim. The result is a panoptic, versus myopic, approach to living, working and learning together.

Universities can enhance the intercultural fluency of professors and students by creating environments that encourage multilingualism, and that respect and engage varied socio-economic backgrounds and disciplines, acknowledging the varied religions and cultures that serve as a backdrop to intercultural and global transactions.

In order to equip professors and students to act as civilized and responsible citizens, moving freely across borders and cultures, universities can play a role in enhancing attributes that explore and develop the values and skills associated with intercultural experience, empathy and courage.

FINAL REMARKS

Rapid global transformations, spurred on by a massive revolution in the nature and use of communication technologies, is spawning a sense of connectedness and dependency in "the millennial generation". Higher education may both require and facilitate global citizenship. A prime role for universities today is to foster actively the development of global citizenship in students and staff. Indeed, the case can be made that this will increasingly be a hallmark of success for the university, and its teaching and research programs.

The seven directions described here aim to support universities in embracing an institutional responsibility to promote in its faculty and students global citizenship. These can be viewed as an institutional menu, to be adapted to the needs of an institution and the individuals and committees it serves. In this sense, each strategy might be applied in consideration of the particularities of each institution: their respective organizational histories and cultures, funding sources and budgets, long-term missions and current priorities. The progress that may be achieved has the potential to be powerful.

Embracing global citizenship can be challenging; integrating this goal into an institutional mission and context may be dizzying but essential. Increasingly, globalization will require universities, their communities and members to adapt, and to foster the widespread desire, and means, to achieve global citizenship.

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