Lehigh’s International Portfolio
Mapping International Activities
on the Four Program Priorities

Taking Lehigh to the World
and
Bringing the World to Lehigh

Report by
Mohamed S. El-Aasser
20 February 2012
# Lehigh International Portfolio

**Mapping International Activities on the Four Program Priorities**  
*Taking Lehigh to the World and Bringing the World to Lehigh*

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Lehigh International Portfolio
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**Foreword**

In 2009, the Lehigh University community launched a new Strategic Plan. Among the Plan’s major components was the identification of three Grand Challenges, one of which was “Globalization.” That same year, Lehigh made the bold move of establishing the Office of International Affairs (OIA) with a newly created leadership position, Vice President for International Affairs. The role of this position was and continues to be to lead, leverage, and be an advocate for Lehigh international initiatives. OIA, working with a faculty committee, created the following Mission Statement:

_To further globalize Lehigh’s mission of advancing learning through the integration of teaching, research and service to others through a systematic and sustained engagement between the Lehigh Community and the World-At-Large._

As a means of fulfilling that mission, two overall goals were identified …

- **Internationalization of Lehigh Community**
- **Expanding Lehigh’s International Footprint**

… and four program priorities were established to reach these goals:

- **International Connections**
- **International Experiences for Students (Undergraduate and Graduate)**
- **LU – Destination for International Students, Scholars, and Visitors**
- **Internationalization of Lehigh University**

The above is the foundation of Lehigh’s International Portfolio, which was discussed with the university’s senior officers including the college deans, and concluded with the International Portfolio being adopted by the BOT’s Sub-committee on Global Affairs.

What follows is an overview of the outcomes to-date with some examples of the ongoing and newly developed international activities, on and off campus, mapped under each of the above four program priorities. These examples are by no means a complete listing of all the initiatives currently in place or that are being developed, but are intended to give the reader a sense of the direction the university is taking in this area. Also the aim is not to display only the success stories, but rather to (i) begin a process of assessing what we are doing; (ii) to create a template for integrating the various components of the international portfolio; and (iii) to identify the challenges that we are likely to face as we implement the Lehigh international portfolio and scale up some of the activities over the next 5, 10, 15, and 20 years. Our vision is clear and bold “to have a systematic engagement between Lehigh and the world-at-large through the integration of teaching, research, and service to others.” It is understood that as a university we are committed for the long haul and, therefore, the implementation of Lehigh’s international portfolio must be done in stages keeping our eyes open for new opportunities; recognizing the challenges ahead related to issues of scalability, sustainability, and resources; and being creative in addressing them.

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1 An online version of the Strategic Plan can be found at http://www.lehigh.edu/2009plan/.
2 More information about OIA can be found at http://www.lehigh.edu/international/invpia.html
The purpose of this report is to relate to the readers that there is significant momentum happening in the implementation of Lehigh’s International Portfolio. We have embarked on establishing institutional partnerships at key regions around the world to serve as platforms for launching two-way collaborations in faculty research, student experiences abroad, advanced graduate studies, and educational programs, thus enabling Lehigh to enhance and anchor its international footprint on firm grounds in these regions. We have taken steps to increase Lehigh faculty’s successful participation in the competitive and prestigious Fulbright scholarship program; we have created and tested new and innovative international experiences, in addition to existing study abroad programs, to meet the diversity of student needs and contribute to their successful careers as leaders in the global economy of the 21st century; we have been proactive in making Lehigh a favorable destination for international undergraduate and graduate students to study, for visiting and Fulbright scholars to conduct their work, and for holding international conferences; we have initiated a process for integrating an international, intercultural, and global dimension into the Lehigh fabric; finally, we have created a set of robust metrics for assessing our progress and helping us to achieve our internationalization goals.

Finally, we understand that the university values and needs the continued engagement of its students, faculty, staff, administrators, alumni, and the members of the Board of Trustees in order to move forward. We believe that with the support and engagement from all levels of the university, we should be able to keep the momentum going and be creative in facing the challenges and turning them into opportunities at the appropriate time.

**INTERNATIONAL CONNECTIONS**

**Institutional Partnerships**

*Taking Lehigh to the World* is part of Lehigh’s new tag line. Building on our individual faculty collaboration and alumni base, Lehigh has recently established new institutional partnerships in South East Asia, Russia, China, and is in the planning stage for India and Africa, to be followed by South America. These activities are in addition to developing and nurturing existing collaborations in Europe and the Middle East. Institutional partnerships are viewed as platforms in selected regions around the world for the purpose of developing sustained two-way collaboration in faculty research, student experience abroad, advanced graduate studies, and joint educational programs. Partnerships are usually with universities, but may include NGO’s, corporations and national laboratories overseas. Currently, Lehigh has 12 university-wide international Institutional Memoranda of Understanding (MOU’s), and 49 agreements targeting departments/colleges in a specific area of research, graduate student exchange, or study abroad for undergraduate students. Individual faculty international collaboration will continue to be encouraged and nurtured.

![Lehigh International Connections by Region](image)
Data from Lehigh’s World Map is provided in the above graph showing the International Connections data by different regions around the world; these connections are defined as known Lehigh alumni, known individual Lehigh faculty international activities, Institutional partnerships and individual agreements, Lehigh faculty Fulbright scholars, visiting international scholars and Fulbright graduate students at Lehigh, Lehigh delegation visits abroad, and visits to Lehigh by international delegations from overseas. The above graph shows the data which add up to a total of 2,172, with 75% (1635) being Lehigh Alums.

**Establishing International Institutional Partnerships**

- Over the past three years, the OIA took the lead, working with faculty/staff groups to establish new institutional partnerships in several regions around the world.

- New international institutional partnerships were established with 9 universities; these include 4 in South East Asia (3 in Malaysia and 1 in Indonesia), 4 in China and 1 in Russia. Currently, we are in the planning process for India and Africa to be followed-up by South America (starting with Brazil). This is in addition to developing and nurturing existing collaborations in Europe and the Middle East. A complete list of Lehigh international partners is given in Appendix I.

- We’ve articulated a clear process for creating institutional partnerships as follows:
  
  o The process is initiated by first assembling a faculty study group, representing all four colleges, and appropriate staff/administrators. One study group for each region has been convened (South East Asia 2008, China 2009, India 2010, and Africa 2011).
  
  o The study group examines Lehigh’s current presence in the region (inventory of international activities, faculty connections, and alumni), defines the proposed Lehigh international portfolio, selects the appropriate universities with high potential for matching Lehigh’s needs, uses all existing Lehigh connections to initiate contacts with universities, selects the appropriate number of universities and selects the membership of a Lehigh delegation for a trip to the region in order to have face-to-face discussions on areas of mutual interest for collaboration.
  
  o Lehigh then arranges for a Lehigh Faculty delegation trip to the region which includes creating an agenda for each visit in collaboration with the host institution.
  
  o The Lehigh delegation requests reciprocity by a delegation from the host institution to visit Lehigh in order to have a follow-up face-to-face discussion with a larger group of Lehigh faculty. Once this step is completed a Memorandum of Understanding (MOU) is signed.
  
  o Following the delegation trip, a report is assembled with action items and plan for a follow-up with the help of a working group for that region.

- By working collaboratively with a group of faculty, a list of criteria to be used when identifying and selecting international partner institutions has been established. These criteria ensure there will be a match with Lehigh values and needs, as well as providing a symbiotic and complementary relationship. This is an important step because it guarantees that when the Lehigh delegation members travel, there is a unified understanding of what Lehigh is specifically looking for in an international partner. This ensures that the delegations travel to partner schools who can assist Lehigh to meet its goals, as articulated in Lehigh’s International Portfolio.

- In addition, a presentation about Lehigh was created to introduce Lehigh to our potential partners and a proposal for two-way collaboration is presented during the visit to the international university to initiate a substantive dialog with potential partners. The criteria for selecting international partners and the proposed components for collaboration are given in Appendix II.

- A total of 7 delegation trips took place between November 2008 and January 2012 for the purpose of establishing new partnerships in South East Asia and China and for following up on existing collaborations. Typically, the delegation is comprised of 5 – 9 members (mostly faculty with some staff)
lead by the VP for International Affairs. *A list of Lehigh delegation trips abroad is available in Appendix III.*

- Currently, LU has 12 university-wide international Institutional Memoranda of Understanding (MOU’s) and 49 agreements targeting departments/colleges in a specific area of research, graduate students exchange, or study abroad for UG students.

**Nurturing Partnerships**

- Two senior faculty members have been appointed to the role of Senior Faculty Advisors for International Affairs. In addition, one staff member will have the task of following up on all action items related to international partnerships and delegation visits by partner universities to Lehigh. The two Senior Faculty Advisors to OIA will be working collaboratively with the VP for International Affairs and OIA staff in order ensure that the institutional partnerships are populated with the appropriate activities and nurtured over time, and all action items related to these partnerships are tracked and moved forward by working with appropriate constituencies both at Lehigh and at the partner institution.

- A few overseas trips were taken by individual Lehigh faculty members for the specific purpose of following up on specific action(s) from the delegation trips. *A list of the individual faculty trips is given in Appendix III.*

- In the future, a new Faculty Travel Grants Program will be established by OIA for the purposes of providing funding to send 3 – 5 individual faculty members on an annual basis to visit our partner universities overseas. These trips are essential to enhance the engagement of the interested Lehigh faculty members with Lehigh partners, nurture these partnerships, and follow-up on specific action items.

- One example of a partnership collaboration: A Lehigh Workshop was held at a partner university in China – At the request of East China University of Science and Technology (ECUST) a partner university in Shanghai, Lehigh faculty organized a workshop in collaboration with ECUST faculty entitled, “Workshop on Advances in Emulsion Technology and Nanoparticles for Biomedical and Related Applications” which was held in during the period of October 12-15, 2011. The program attracted more than 150 participants from different parts of China, Hong Kong, and Korea. The workshop proved to be invaluable for discussing not only current research but also for articulating future direction of research in the field. It also allowed the participating faculty, including those from Lehigh and ECUST, to discuss potential areas of collaboration including exchange of faculty and graduate students. Five students from ECUST, who are holding scholarships from the Chinese Scholarships Council (CSC), applied to Lehigh for their PhD studies in the fall 2012. Finally, Lehigh and EUCST have agreed to organize a bi-annual workshop focusing in different themes.

**Faculty International Connections**

- Lehigh faculty typically build their international connections over the years through their own research and scholarly work and by participating in international conferences. A sample of individual faculty collaborations was captured via a Faculty Survey of International Connections commissioned by the Global Lehigh Metrics Committee in the spring 2010 with 140 responses (voluntary participation – does not reflect the full faculty), as shown below.

![Graph showing region(s) of the world and provide name of country:](image)
Faculty Grants for Promoting International Connections

- The OIA provides up to 5 faculty grants annually, on a competitive basis, with the goal of providing the faculty with opportunities to develop their own new, or enhancing current, international connections that will lead to expanded international collaboration between Lehigh faculty and their counterparts in academic/research institutions abroad focusing on areas of mutual interest. Over time, faculty members who are internationally connected will play a crucial role in achieving Lehigh’s two overall goals of expanding Lehigh’s international footprint and the internationalization of Lehigh’s community.

- Ten faculty members received the OIA grants for the first two cycles during 2010 and 2011, which allowed each to spend up to two weeks at universities in France, Germany, Switzerland, Brazil, Ireland, India, Japan, and Peru. The 2012 grant cycle is currently in progress. A list of the faculty grant recipients and their Lehigh affiliation is given in Appendix IV.

LU Fulbright Overseas

- Recognizing the important role played by the prestigious Fulbright scholars in enhancing Lehigh’s international reputation, in addition to the obvious direct benefit to the faculty member, the OIA took several steps three years ago with the goal of increasing Lehigh faculty participation in this highly prestigious and competitive scholarship program. An advocacy group of previous Fulbright faculty was created to promote and advise their Lehigh faculty colleagues for how to prepare a winning competitive application. An OIA staff member was assigned the task of being the campus contact person for the Fulbright Program. The head of the Council for International Exchange of Scholars (CIES) Fulbright Office in Washington DC was invited to conduct a workshop at Lehigh for interested faculty in 2010.

- Over the past 3 years, 7 Lehigh faculty members were the recipients of prestigious Fulbright Scholarships. Each of them spent one year each in universities or research institutions in the following countries: Brazil, Ghana, China, Mali, India, and Germany.

Research Collaboration and International Visiting Postdoctoral Fellows

- It is well known that the university faculty play a pivotal role in the internationalization efforts by creating new knowledge through their research and the dissemination of the outcomes through education, and in some cases the application of new knowledge in solving societal problems. International collaboration is viewed as one of the major characteristics of the 21st century, since many societal challenges, including education, have global dimensions. Mobility of scholars and students across international boundaries play an important role in maturing research ideas and addressing global challenges. We view individual Lehigh faculty international connections, as well as the creation of institutional partnerships abroad as an important component of Lehigh’s engagement with the world-at-large. Face-to-face discussions among the Lehigh faculty and their counterparts is the only way research collaboration can develop, and thus, it is one of the key components in establishing institutional partnerships. In many fields, the research collaboration involves two-way exchange of faculty, postdoctoral fellows, and graduate students. Please reference Appendix II for Lehigh’s proposed components for collaboration with potential partners.

- The discussions related to research collaboration between Lehigh faculty and their counterparts during the delegation trips to our partner institutions, as well as the partner trips to Lehigh, typically center around what they can do together in collaborative research, joint publications, joint supervision of graduate students and postdoctoral fellows, as well as exchange visits among the researchers to each other's laboratories, and joint research proposals to funding agencies as the opportunities becomes available. The outcomes so far are increasing and are too numerous to list in this document. These will
be part of our future international data collection system and the integration process referred to at the end of this section.

- In 2010 and 2011, 139 international visiting scholars/postdoctoral fellows joined Lehigh to conduct their research with Lehigh faculty members. These visiting scholars are typically fully funded by scholarships from their governments and/or their universities abroad. It is expected that mobility of faculty and research scholars will increase over the years as a result of the institutional partnerships.

**Lehigh’s President and Vice President International Connections**

- **President Alice Gast:**
  - **Singapore:** Since 2006, Dr. Gast has served as a member of the Academic Research Council, an international advisory board to the Singapore Ministry of Education. Her efforts in this capacity are advisory and related to Singapore’s system of higher education. Dr. Gast is the ARC liaison to the governing board of SCELSE (the Singapore Centre on Environmental Life Sciences Engineering), an interdisciplinary Research Centre of Excellence (RCE) housed at Nanyang Technological University (NTU) in Singapore. Again, her efforts here are directed at providing an advisory voice to the SCELSE governors as they develop new research initiatives and directions. Dr. Gast has also cultivated a relationship with Mr. Ee Cheong Wee, the Deputy Chairman and CEO of United Overseas Bank, Ltd (UOB), one of the largest banking entities in Singapore. Mr. Wee’s son, Teng Chuen Wee, is a 2009 Lehigh graduate, and Mr. Wee and UOB have been an instrumental presence assisting with student recruitment efforts in Singapore.
  - **Malaysia:** Dr. Gast first met HRH Raja Zarith Sofiah, Chancellor of the Universiti Teknologi Malaysia (UTM), in January 2011 during a trip to the region. They had a wide-ranging discussion about the Islamic world generally and Lehigh’s work in this area more specifically (through the Center for Global Islamic Studies). Since then, the Vice-Chancellor of UTM, Dato’ Zaini bin Ujang, has visited Lehigh along with a delegation from UTM (in June 2011), and has brokered further contacts between Dr. Gast and HRH Raja Zarith Sofiah. During her most recent trip to Malaysia in January 2012, Dr. Gast hosted an event for Lehigh alumni in Kuala Lumpur, and also met again with HRH at her residence in Johor Bahru, Malaysia. This relationship continues to grow and expand, both institutionally and personally between Lehigh and UTM.
  - **Saudi Arabia:** Dr. Gast was appointed to the President’s International Advisory Council (IAC) at KAUST – the King Abdullah University of Science and Technology – in Thuwal, Saudi Arabia, and began her service on that advisory board in February 2011. In June 2011 Dr. Gast was appointed to the KAUST Board of Trustees, and she began a three-year appointed term of service. To date, Dr. Gast has made three trips to Saudi Arabia for meetings at KAUST. She was also appointed to serve on the Executive Committee and the Memberships and Governance Committee for the KAUST board. During her service at KAUST, she has also cultivated a relationship with His Excellency Minister Ali Al-Naimi, the Saudi Arabian Minister of Petroleum and Mineral Resources, who is a Lehigh graduate (class of 1962) and the Chairman of KAUST’s board of trustees.
  - **Science Envoy (Central Asia/Caucasus):** In September 2010, Dr. Gast was named by Secretary of State Hillary Rodham Clinton as one of three science envoys, part of the second such round of envoys, and assigned to the regions of Central Asia and the Caucasus. The science envoy program was launched in 2009 as a response to President Obama’s speech in Cairo, with the intention of increasing science & technology diplomacy to Islamic majority countries (the program has since been expanded to non-Islamic majority countries). In March 2011, Dr. Gast traveled to Azerbaijan, and in June 2011, she completed her second round of travel, to Kazakhstan and Uzbekistan. Her capacity as envoy was as a “citizen diplomat,” assigned to visit several universities, national research centers, and government officials in each country. Her trips consisted of discussions about science and technology infrastructure,
initiatives, and projects in each country, as well as attending public media events and conducting conversations with students and faculty at various universities. At this time, Dr. Gast’s work as science envoy is complete, and no further travel is being planned. Another round of science envoys is due to be announced by the Department of State sometime in early 2012.

**Vice President Mohamed El-Aasser**

- Dr. El-Aasser participated in several trips overseas to Indonesia (2009), India (2010), and Russia (2011) as a member of US delegations organized by the Institute of International Education (IIE) and lead by Dr. Allan Goodman, the CEO and President of IIE, and a high ranking official from the US Department of State and/or the US Department of Education. Another trip was to South Africa (2009) with People-to-People, specifically related to science education, which lead to initiating contacts for Lehigh’s College of Education.
- The goals of these trips were to understand the landscape of higher education, to gain in-depth knowledge of the educational system of higher education in these countries, to promote US collaboration with institutions of higher education in these countries, and to establish a personal professional network for future activities related to expanding Lehigh’s international connections in these regions of the world. Upon completion of each trip, a detailed report summarizing the various activities during the visit and potential benefits to Lehigh was prepared and circulated to Lehigh’s senior leadership as well as the BOT Global Affairs Sub-Committee. A personal follow-up was done with the appropriate members of the Lehigh community who have the potential of benefiting from the opportunities that were identified during the VP trip.
- An important direct outcome of the above trips by the VP is the initiation of Lehigh’s institutional presence in Indonesia, Russia, and South Africa, and the laying of a foundation for the launching of Lehigh’s international activities through subsequent visits, i.e., VP lead delegations of Lehigh faculty and staff with the outcomes articulated later in this report.
- Another example of a tangible result is the successful proposal to the IIE/US State Department which resulted in funding a summer program in 2011 for a cohort of undergraduate students from Lehigh and University of Michigan, and Indonesian Students from Universitas Gadjah Mada (UGM) in the area of *Democratic Society and Religious Pluralism* with the participation of faculty members from all three institutions. The program will be repeated in the summer of 2012. This initiative resulted in the signing of a university-wide MOU in 2011 between UGM and Lehigh.
- Another outcome of these trips is the expansion of Lehigh’s international visibility and networking through the one-on-one interaction with universities and other government organizations in the host country.
- In addition, these trips have led to building a strong personal relationship between Lehigh’s VP for international affairs and the President/CEO of the IIE which has been of great benefit to Lehigh as the university moves forward in expanding its international activities.
- The VP has also taken separate trips to Saudi Arabia (2010), Egypt (2011), and Korea (2011) for specific activities related to International programs. These include building a relationship with King Fahd University of Petroleum & Minerals (KFUPM) that led to sending fully funded PhD students and undergraduate students to study at Lehigh for one semester. The number of KFUPM undergraduate students is expected to increase to up to 15 in fall of 2012.
- The VP has served on the scientific committee of the Malaysian Rubber Board since 2010 and participates into their annual meeting in Kula Lumpur, which adds value to Lehigh’s international portfolio in Malaysia.

**Lehigh Alumni Connections Abroad**

- Although incomplete, our data suggest that we currently have 1635 Lehigh Alumni overseas, with the largest number (465) in East Asia, followed by Western Europe (338) and Southeast Asia (197). *The data by region is given in Appendix V.*
In 2010 Lehigh initiated an electronic international newsletter specifically aimed at providing information to the LU alumni living abroad and keeping them informed and engaged.

Lehigh alumni abroad have been extremely supportive and involved in helping us in the implementation of Lehigh University’s international portfolio. They helped in many activities including, among others, opening doors and making connections for us in the process of preparing for Lehigh delegation trips overseas for purpose of establishing international institutional partnerships, participating in alumni social events in the region, following up on recruiting efforts for undergraduate students, and providing opportunities for undergraduate international experiences abroad. We must continue to nurture our connections with Lehigh international alumni and engage them in expanding our international activities abroad.

**Looking Ahead**

The following tasks are important to the success of Lehigh’s internationalization initiatives and should be completed over the next 2 to 3 years.

1. To complete the selection of the appropriate number of institutional partnerships which will serve as Lehigh platforms to launch joint international activities in the selected regions around the world; and
2. To populate these platforms with collaborative international activities to the benefit of our faculty, students, and Lehigh research and academic programs, as well as to anchor our footprints abroad on firm grounds in these regions.

This so called “Lumpy Approach” (because the partnerships are established only in a select few regions around the world) will ensure that we don’t spread ourselves too thin and by maintaining complementarity of the international activities in these regions relative to our own needs, which may change from time to time, ensuring that the needs of our four colleges and Lehigh as a whole are being met. We are expecting one of the future challenges to be data collection so that we can track the collaborative international activities with our world-wide partners, in order to integrate and manage them efficiently. We believe that the solution resides in the UCosmic software, which is being developed by a consortium of 7 universities of which Lehigh is a partner. 
* A short description of UCosmic is provided in Appendix X.*

**INTERNATIONAL EXPERIENCES FOR STUDENTS**

Once again, this priority is in keeping with the first part of our university’s tag line Taking Lehigh to the World. A total of 554 undergraduate students had an international experience in 2010-2011 in 44 different countries. Currently ~ 40% of LU undergraduate students have an international experience at least once by graduation. Consistent with the 2007 faculty recommendations, a *Signature of a Lehigh Education* for the 21st century has been developed in order to make an international experience available and affordable to all students. A dozen international programs have been designed to meet the diversity of student needs from different disciplines/colleges. These include long term, short term, work & learn, service learning, imbedded in courses, faculty/staff lead theme-based cohort, and international research practicum.

- **Study Abroad** - The most recent 5-year data (see graph below) shows a modest increase in the total number of Lehigh students who participated in a study abroad experience from 470 (in 2007) to 554 in (2011). In 2011, 70% of Lehigh students participated in short-term opportunities compared to the traditional one-semester/one year. This is a natural trend according to the 2011 Open Doors Report by the Institute of International Education (IIE).
According to the 2011 IIE report, Lehigh is ranked 35 among the top 40 doctorate-granting universities in AY 2009/2010 based on the percent of undergraduate student participation in study abroad by the time of graduation, relative to the total number of students who graduated in that year. Lehigh’s percentage was 34.8%. For reference, University of San Diego ranked 1st with 71.4% of their graduating class participated in study abroad, Notre Dame ranked 9th (56.8%), Tufts ranked 11th (52.6%), Northeastern 15th (48%), Princeton 20th (45%), Syracuse 22nd (43.5%), Vanderbilt 24th (41.9), and Delaware 29th (38.1%).

Recognizing that having an international experience abroad is an important component of Lehigh’s undergraduate student learning experience and a contributor to a successful career in the 21st century, the OIA has embarked over the past three years on developing new and innovative international opportunities in addition to existing programs, in order to expand our offerings and meet the diverse needs of the students from various majors. A listing and short description of 12 new and existing study abroad programs is available in Appendix VI.

Piloting Study Abroad Programs - Several new programs have been piloted, thanks to the generous contributions by members of Lehigh’s BOT’s to the University Global Initiatives Endowment that provided the resources for OIA to make available seed funding and cost sharing to pilot these programs. These are The Lee Iacocca International Internship Program, Affinity Group and Departmental-based Programs, International Research Practicum, Service & Experiential Learning Abroad, Theme-based Cohort International Experience, and Summer International Practicum Cohort in Industry. Several of these new programs are amenable to scalability under the right conditions. Please refer to Appendix VI for short descriptions. Because of its potential significant long-term impact, the Lee Iacocca Program is singled out below.

The Lee Iacocca International Internship Program provides an array of international work experiences for Lehigh students that include international internships, co-ops, research experiences, and cohort internships. Thanks to Lee Iacocca’s gift endowment, which started with 1 million dollars in 2011/2012, and with Mr. Iacocca’s pledge of providing up to $5 million incentive funds on the basis of 1 to 1 matching, this endowment may build up $10 million dollars over the next few years. This endowment represents the first gift targeted to support international opportunities abroad for Lehigh undergraduate students, making many more opportunities affordable. The program will kick-off in the summer of 2012 by sending 10 students on individual internships in 8 countries and 6 students to Costa Rica for a cohort experience dealing with sustainable development.
The OIA has also piloted several other new study abroad programs based on recommendations from the four colleges: Lehigh in Singapore (2010, 2011) for CBE students; Lehigh in Israel (2011), and Lehigh in Brazil (2010) for CAS students; Lehigh in Cambodia (2009) for COEd, CAS, and CBE students; Summer Research Internship, at Nanyang Technical University Singapore (2010) for chemical engineering students; and the Mobil Application Project in Zambia (2011) for computer science and engineering students.

New Undergraduate Exchange Programs

- **Global Engineering Education Exchange (GEE³)** – Recognizing a growing demand for internationally-experienced engineering graduates, a group of leading universities around the world established the Global E³ in 1995. Global E³ allows engineering students at member universities to enjoy a fulfilling study abroad experience with tuition swap. Lehigh became a member in 2009.

  - Three students from Universiti Teknologi PETRONAS (UTP) – one of Lehigh’s partner universities in Malaysia – studied at Lehigh for one semester (1 in fall 2010 and 2 in fall 2011).

- **Global Citizenship (GC) Program** – This program designed around “global citizenship,” which includes two abroad experiences, has been offered to first year undergraduate students since 2004. In 2011, the faculty embarked on a process to reinvigorate the program content and integrate it more into the Lehigh’s internationalization efforts. The OIA is funding a series of development workshops for a select number of Lehigh faculty to integrate GC activities into the university’s strategic grand challenges. The proposed initial workshops will focus on the following three topics: Global Citizenship and Health, Global Citizenship and Sustainability, and Global Citizenship and Social Justice. The workshops will be conducted in the spring 2012, and the new program content will be offered in AY 2012/2013.

  - **Lehigh Selected by the UN as hub for GC** - Lehigh’s Global Citizenship and LU/UN program were selected by the UN to become the United Nations Academic Impact Hub for Global Citizenship – resulting in designing a website in this area for the UN which was rolled out in May 2011.

- **US-Indonesia Funded Summer Program** – Lehigh, in conjunction with 5 other US universities and the IIE, submitted a solicited joint proposal to the US Department of State for funding from the U.S. – Indonesia Partnership Program for Study Abroad Capacity Building in Indonesia. The proposal was successful and a grant for two-year funding was received. A program was successfully piloted in the summer 2011 entitled, Democratic Society and Religious Pluralism, including an educational exchange trip, led jointly by Lehigh University, University of Michigan, and Universitas Gadjah Mada (UGM). The program will run for the second year in the summer of 2012 and will be expanded to include Universitas Indonesia Jakarta. Lehigh University and the University of Michigan are planning to submit a proposal to the LUCE foundation for a 3-5 year grant to support the program starting in 2013. The initial conversation with LUCE is positive.

- **Grants for Undergraduate Students** - The OIA made available funds to provide up to 10-15 annual grants in order to allow undergraduate students, who may not otherwise be able to afford it, to have the opportunity to participate in an international co-curricular experience abroad. Preference is given to first timers. In 2011, three grants were awarded to students who traveled to Cyprus, Georgia, and Antigua-Barbuda, based on recommendations by the International Experiences Advisory Group (IEAG) that oversees the process.

- **Examples of Services Provided** (for complete list of services please click on the following link) http://www.lehigh.edu/international

  - **Raising Awareness and Informing students about opportunities of experiences abroad.** The Study Abroad office in collaboration with various offices around the campus, including colleges and student affairs and individual faculty, are actively involved in providing information to
students and helping them decide on the best international opportunity that match their interests. In addition to the rich information on the website, the Study Abroad office typically has more than one hundred events during the semester to raise awareness of the entire student body. Other activities include Club Expo, brown bag discussions with students who completed study abroad, passport day, college presentations, international corner and career fair, presentations at Candidate's Day, and so forth.

- **Study Abroad Pre-departure orientation and other services** – The office of Study Abroad provides all students who are preparing to study abroad with an orientation to prepare them for their abroad experience and review administrative details leading up to their program departure. The orientation sessions include brief presentations from the following Lehigh offices to inform students of the services available to them before, during, and after their abroad experience: Dean of Students, Health Center, Counseling Office, Career Services, Financial Aid, Registrar’s Office, and break-out session with prior Lehigh study abroad students. In 2011, 239 programming events related to study abroad were held; 293 students attended group advising sessions; 522 students attended individual advising sessions.

- **International SOS Services (ISOS)** - Lehigh has contracted with ISOS to provide students traveling overseas on a university-sanctioned program with a wide range of services including emergency medical, personal, travel, legal, and security assistance. Services range from telephone advice and referrals to full-scale medical evacuations by private air ambulance. The ISOS Network of critical care and aero medical specialists operates 24 hours a day, 365 days a year from ISOS Alarm Centers around the world.

- **International Experiences Advisory Group (IEAG)** – This group is tasked with providing advice and guidance to the growing number of student groups wishing to engage in programming abroad. Recent examples have been Student Athletes Leading Social Change (SALSC) in Bolivia and Zimbabwe, and Social Entrepreneurship - Microfinance & Sustainable Empowerment through Agricultural Development (SEAD) in Kenya and Ghana.

**LEHIGH UNIVERSITY AS A DESTINATION FOR INTERNATIONAL STUDENTS, SCHOLARS, and VISITORS**

The second part of our university’s tag line is *Bring the World to Lehigh*. This is an international component/activity that directly benefits the overall university. Every visiting student and scholar, and every international conference represents an opportunity to market our university in general and unique programs in particular. For the fall 2011 semester LU has ~ 5.5% foreign students from 50 countries (based on a total of 4,810) and ~ 57.8% foreign graduate students, including 14 Fulbright graduate students, from 54 countries (based on 1,111 full time graduate students), and 64 international visiting scholars and postdoctoral fellows.

**International Undergraduate Students**

- The graph given below shows a steady increase over the past 5 years from 115 international undergraduate students in 2007 to 252 in 2011. Targeted recruiting efforts in several regions around the world, including students who have scholarships to cover the cost of education at Lehigh, are partially responsible for this recent trend. *Detailed information showing the regions from which these students came from is available in Appendix VII.*
Pipeline for funded transfer students from INTEC, Malaysia - A new pipeline of fully funded transfer students was developed through INTEC, Malaysia as a direct result of OIA efforts in establishing new partnerships with institutions in South East Asia starting in 2008. These Malaysian students study for one or two years at INTEC and are specifically trained to qualify for undergraduate studies in American Universities. In 2009, 15 INTEC students applied and all were accepted, two were matriculated and joined Lehigh in the fall 2010. In 2010, 32 INTEC students applied, 10 were accepted, and six joined Lehigh in the fall 2011.

- The Malaysian students on 16 February received preliminary recognition from the Lehigh University Student Senate to establish Southeast Asia Student Club on campus with the goal of educating the campus about Malaysia and its culture. Professor Nandu Nayar, Department of Finance, has agreed to serve as their faculty advisor.

Pipeline for one-semester funded students from King Fahd University of Petroleum & Minerals (KFUPM) - A new pipeline has been developed for fully funded undergraduate students from KFUPM to study for one semester at Lehigh. 4 students (2010) and 3 students (2011), from KFUPM studied at Lehigh Chemical Engineering. Fifteen KFUPM undergraduates have applied to study at Lehigh’s chemical engineering, electrical engineering, computer science, and industrial and systems engineering departments.

- All KFUPM participate in Lehigh’s ESL summer training program (StepUp) prior to their studies in the fall semester.

International Graduate Students

- The data given in the graph below show a steady increase in international graduate students over the past 5 years from 469 international graduate students in 2007 to 642 in 2011. Detailed information showing the regions from which these students came from is available in Appendix VII.
Fulbright Graduate Program

Lehigh welcomed 9 Fulbright graduate students to campus in the Fall of 2011. Spread across all four colleges, the students hail from Afghanistan, Lesotho, Mongolia, Turkey, Ukraine and Yemen. Several are taking part in Lehigh's new Energy Systems one-year master's degree, while others will be part of the Lehigh community for four years of doctoral study. In the fall of 2010, Lehigh was home to 6 Fulbright graduate students, ranging widely in background, interest, and geography. Coming from as far away as New Zealand, Afghanistan, and Indonesia, this elite group of students studied wireless technology uses in education, electrical power grids, rights for under-served populations, and structural engineering.

The OIA assigned a staff member to be the Fulbright On-Campus Representative to the Fulbright Program. This representative is responsible for assisting the colleges in recruitment of graduate students, working with partner organizations like IIE, LASPAU (an academic and professional program for the Americans affiliated with Harvard University), and AMIDEAST in placing students at Lehigh and settling and orientating those students upon arrival. In addition, this person manages the Fulbright Student Association which provides co-curricular support activities. The staff member arranges venues for the Fulbright graduate students to contribute to the internationalization of the campus community through presentations about their countries as well as sharing the culture of their countries with some of the local schools.

Delegation visits to Lehigh University

A total of 48 delegations from universities abroad visited Lehigh in 2010, 2011, and two months into 2012. They came from Europe, East Asia, Latin America, the Middle East, Russia, South East Asia, and South Asia. A complete list of visits to Lehigh by delegations from Abroad is given in Appendix IX.

The visits to Lehigh campus by delegations from partner universities and other groups/individual scholars from abroad are essential to the further development and nurturing of our institutional partnerships. Such visits provide the opportunity for faculty to meet personally with their counterparts and have face-to-face discussions about areas of mutual interest in research and academic programs. These visits also allow senior leadership from our partner institutions and other institutions who are exploring collaboration with Lehigh to have an in-depth understanding of Lehigh’s values and its community of faculty, staff and students, the breadth of the programs we offer, and the facilities and the infrastructure that Lehigh has.
The OIA developed a process to organize these delegation visits to campus in order to ensure that they meet with the appropriate groups of Lehigh faculty, staff (and sometimes students), provide them a good exposure to Lehigh facilities and hospitality, assign a person to take notes during the meetings, and have a mechanism to follow-up both on-campus and off-campus on all the actions items form the meetings.

**Lehigh Summer School for Southeast University (China)** - The OIA worked with RCEAS to organize and offer a 3 ½ week summer school in 2011 for 20 engineering faculty members from Southeast University, a partner university in Nanjing China. The purpose is to learn how Lehigh teaches 1st year engineering using the hands-on project-base experience. Three of Lehigh faculty members were involved in teaching the South East faculty members who sat in the classroom as students. While at Lehigh, the South East faculty members met individually with their Lehigh faculty counterparts to discuss opportunities for research collaboration and graduate studies in areas of mutual interest.

- The South East University paid fully for the summer school which represented revenue to the college and its faculty. South East requested a repeat of the summer school at Lehigh in the summer 2012 for another group of their faculty.

**Research Workshop for Kazan National Research Technological University (KNRTU), RUSSIA** - In the December 2011, 9 faculty members from KNRTU participated in a two-week workshop on Polymer Science and Engineering at Lehigh University by Lehigh’s Emulsion Polymers Institute and The Center for Polymer Science and Engineering. Sixteen faculty members from Lehigh participated in the workshop and an extensive discussion was conducted following each presentation by Lehigh faculty with the Russian faculty. As a result at the end of the two weeks, the two groups agreed on a set of specific research areas for future collaboration based on found matching interests with plans for involving faculty and students from both universities. A working group comprised of four faculty members and one staff from each university was created with the task of following up on the action items.

- Four Lehigh faculty members and 1 staff member will travel in July 2012 to KNRTU for a second workshop focusing on Polymer Science and Engineering. All costs associated with the above two workshops is covered by KNRTU.

**International Conferences**

Organizing International Conferences at Lehigh enhances our international visibility and reputation. The OIA is supporting faculty organization of such conferences and provides partial financial support. The following are examples of recent conferences.

- Culture, Communication China, April 2011.
- Implementing Sustainable Development, a workshop held in October 2010, and attended by Dr. Tariq Banuri, Director of the UN's Division of Sustainable Development.
Invited Guests and Dignitaries

Lehigh University has a long tradition of bringing international dignitaries to campus. These visits have been organized and hosted by many groups within the university. In 2010 the OIA took the step of creating a protocol regarding how dignitaries, and in particular, international speakers, should be treated while visiting the university. By establishing these guidelines, we are assured that all appropriate offices are able to coordinate and leverage resources and staffing. The result is that our international dignitary has the benefit of seeing the full view of Lehigh University.

Summer International Programs at Lehigh

- **Global Village at Lehigh.** The Iacocca Institute has been offering this program since 1997. It is a six-week summer program designed for future leaders of business and industry that provides them with the chance to experience a total immersion leadership program to work in a global market. The program has about 2,000 graduates over the past 14 years from 115 countries which are considered to be part of Lehigh international alumni pool (*not included in the world map presented in this document*). The number of participants in the Global Village over the past few years has been on the order of 100–110, and they come to Lehigh from about 50 countries.

- **Global Village-on-the-Move** – Lehigh’s Iacocca Institute offers a smaller version (7-10 days) of Lehigh’s summer program at various locations around the world. Past programs were delivered in Peru (2000), Spain (2003), Australia (2005), United Arab Emirates (2006), Malaysia (2010), Peru (2011); Future offerings will be in Italy (2012), and China (2013).

- **The Pennsylvania School of Global Entrepreneurship** – This 5-week summer program offered since 2000 for high school students focuses on topics of global entrepreneurship and leadership. In 2011, 76 students participated with 28 international high school students from 22 countries; the balance was from the US.

- **Global Innovation and Leadership Residency Program** – A summer program, slated to be launched in 2013, focusing on English as a Second Language (ESL), American Culture, Leadership and Entrepreneurship. The Program is being co-developed by English as a Second Language and the Baker Institute for Entrepreneurship, Creativity, and Innovation. The program will be piloted in the summer of 2013 with a total of 10 international students and 5 Lehigh students. The international students will be coming mostly from Lehigh partner universities abroad, and the Lehigh students will act as American cultural liaisons to create a true immersion experience for the international students.

- **TESOL Teaching Practicum Exchange Program: A partnership between East China University of Science and Technology (ECUST) and Lehigh University** – During the summer of 2012 Lehigh will be sending approximately 10 pre-service Lehigh TESOL teachers accompanied by Tim Bonner, Director of English as a Second Language to ECUST from April 29 to May 19 for a 3-week teaching practicum and language and cultural immersion experience. Lehigh would reciprocate by accepting an equal number of pre-service English teachers from ECUST to come to Lehigh University for a similar 3-week experience in July 2012.

Services for International Students and Scholars

- The office of International Students and Scholars provides the following services to new and existing students, visiting scholars, and spouses (*for information about all programs please see http://www.lehigh.edu/international/*)
- **Immigration Services** – The office issues all immigration documents for J-1 (undergraduate/graduate students and visiting scholars), F-1 (graduate and undergraduate students), and H-1 (for research scholars and tenure-track faculty members).
- **Orientations & Counseling** – Twice a year, orientation programs are offered to all new international undergraduate and graduate students. Counseling session to about 200 students monthly covering immigration questions, visa renewals, and status of extensions and handling business issues related to living in the US.
- **Workshops** – on Visas, taxes, and special issues for the spouses of international students and visitors.
- **Cultural Programs** – Six cultural trips annually and an annual International Bazaar featuring all the university's international clubs highlighting their country's food and culture.

- **English as a Second Language – ESL** – Offers the following activities.
  - **Academic English improvement for Lehigh graduate and undergraduate students and their families**: Step Up Intensive English (7-9 weeks); Advanced Credit Courses (14 week small group seminars); IELC – International English Language (private tutoring); and Special English Programs developed for departments as needed (e.g. Advanced Business English for CBE and Advanced Technical Writing for Scientists and Engineers).
  - **American Culture Training**, including social language skills and understanding personal and professional relationships with Americans inside and outside of the classroom.
  - **English Assessments**, English course placement, and English assessment training and advising for Lehigh staff and faculty such as TOFEL score standard setting and state-mandated SPEAK testing.
  - **Teaching English as a Second Language (TESL)**, training courses for Lehigh COE graduate and CAS undergraduate students. English language learner state standard training for the college of Education faculty.

- **Examples of Other Services**
  - Airport Pick-up Service for new 1st Year International graduate and undergraduate Students.
  - International Spouses Support Network.
  - 24 Hour Hot Line for Lehigh University International Students established.
  - The Council For International Students/Scholars Hospitality (CISH): A group of community members who are willing to volunteer their time and efforts to provide a welcoming environment and a “home-away-from-home” for the international students and scholars from around the world who have come to Lehigh Valley colleges and universities to study.

**INTERNATIONALIZATION OF LEHIGH UNIVERSITY**

**INTERNATIONALIZATION** – Lehigh has chosen a holistic approach to internationalization and created an integrated international portfolio with the following four priority goals: international connections, providing international experience to students, making Lehigh a destination to students, scholars, and international conferences, and internationalization of the Lehigh community.

“Whereas globalization is about the world order, internationalization is about organizations and institutions, such as universities. Internationalization means creating an environment that is international in character—in teaching, research, and outreach.” Professor Michael R. Paige (University of Minnesota).

“Internationalization at the national sector, and institutional levels….as the process of integrating an international, intercultural, or global dimension into the purpose, function, or deliver of postsecondary education”. Professor Jane Knight (University of Toronto).

“Internationalization of higher education is one of the ways a country responds to the impact of globalization….” Professor Jane Knight (University of Toronto).
“This position further reinforces that internationalization is a means to ends and not an end itself.” Professor John K. Hudzik (Michigan State University).

- At Lehigh we subscribe to all of the above views and choose an integrated approach to internationalization for our Lehigh International Portfolio as explicitly articulated by Professor Knight of the University of Toronto, “as the process of integrating an international, intercultural, or global dimension into the purpose, function, or deliver of postsecondary education.”

- This document is our first step in mapping the various international activities onto the four international priorities that Lehigh chose as its portfolio. Our future challenge is to gather better information and show how all these are integrated into “the purpose, function or delivery of post-higher education” at Lehigh.

**Interconnections of components of Lehigh International Portfolio**

Although not explicitly stated, our intention is to have our activities interconnected. Here is one example that demonstrates this interconnectedness: Lehigh faculty members with scholarly work and expertise in the topic of “Democratic Society and Religious Pluralism” were responsible for development of the academic program content of the successful theme-based summer international experience for a cohort of Lehigh and Indonesian undergraduate students which was held in the summer 2011. This connection lead to the establishment of an institutional partnership with the Indonesian Universitas Gadjah Mada (UGM) in the same year, which in turn lead to face-to-face discussions on research areas of mutual interest such as, among other areas, earthquakes and climate-change during a delegation visit from UGM to Lehigh in October 2011 and a subsequent visit by Lehigh faculty to UGM in January 2012. In February 2012, UGM approached Lehigh University to partner with them in responding to a major new funding opportunity by the USAID/Indonesia in the fields of applied sciences; the proposed projects must align with USAID Indonesia’s objectives in health, economic growth, and the environment. Faculty members from both universities are in the process of defining the joint research areas to be included in requested concept papers to be followed by a full proposal. Regardless of the outcome, this process will provide the faculty with an opportunity to learn what they can do to together and how to leverage their expertise. It should be mentioned that Lehigh’s recent expanded presence in Indonesia is linked to the participation in 2009 of the vice president (VP) for international affairs in a delegation organized by the US Department of State and the Institute of International Education (IIE), which allowed Lehigh’s VP to learn about the landscape of higher education in Indonesia in general and UGM in particular. The solid networking relationship developed during this particular trip between the Lehigh’s VP for International Affairs with the president of IIE led to an invitation for Lehigh to participate in a successful proposal also funded by the US State Department for building capacity of study abroad opportunities for American students in Indonesia. This is the funding that supported the 2011 summer program referred to above.

- This is just one example of how an integrated approach to internationalization benefits the university community. The challenge now is to create a systematic way to collect all international activities/information, with the overall goal of not only assessing progress or lack of it as it relates to agreed-upon metrics, but also to help the analysis and integration of the information and then communicate it effectively and make it accessible to all constituencies both within and outside of Lehigh. Simply put, it is important that as we expand our networks and international activities, we must have a way to connect the dots on campus and leverage both resources and staff. We believe that the solution is the UCosmic software that Lehigh recently joined its consortium (*please see Appendix X*).

**Examples of International Programs for Enhancing Internationalization of Campus**

- The **Global Union (GU)** is a coalition of more than 45 student clubs and organizations that promote global awareness and cultural understanding within the Lehigh community and the Lehigh Valley. The GU does not replace individual clubs: rather, it allows them a forum to work together. In their willingness to be global in outlook, GU members share a common mission and vision, as well as a
space in which to pursue common goals. The Global Union presents nearly 75 internationally-focused educational, cultural and social programs per year, attracting a large fraction of Lehigh student, faculty and staff.

- **LU/UN Partnership** - In August of 2004, Lehigh University became just the sixth university worldwide to be accredited as a Non-Governmental Organization by the United Nations (UN). This elite global status has enabled thousands of Lehigh’s faculty, staff, and students to take part in UN conferences, attend private meetings with Ambassadors, engage with the Secretary General, serve as Youth Representatives, and to interact on a weekly basis with global decision makers. Each year the LU/UN Partnership offers more than 40 UN related programs, attracting a large fraction of Lehigh students, faculty and staff as well as members of the local community.

- **Study broad Re-Entry Series** - This series is designed with three goals in mind: (i) to allow students who studied abroad to un-pack and share their international experiences with other prospective students, (ii) to help them translate their international experience in marketable skills for career interviews, and (iii) to discuss post-graduation opportunities overseas to volunteer, study, and teach. This program serves two objectives, the internationalization of the campus community as well as recruiting students for study aboard.

**The Advisory Council for International Affairs (ACIA) – established in September 2011**

- In 2009, The Global Lehigh Steering Committee (GLSC) was established with the charge of having representatives from university offices have an open discussion regarding where Lehigh was in its international activities and where the university wanted to go. In 2011, GLSC made the decision that it had successfully completed its task and a new structure was needed - one that would be both smaller in size and could be more agile in responding to the many changes in the international landscape.

- In 2011, The Advisory Council for International Affairs (ACIA) was convened with the following charge:
  - ACIA is a forum to provide for a dialog regarding the opportunities and challenges presented in the international portfolio as well as any other globalization/international interests within the university community.
  - Provide advice and counsel regarding what should be the priority of the international efforts as it relates to programs, infrastructure, and resources (both financial and staff).
  - Oversee the three working groups as well as any pilot university policies that are developed by the OIA.

**Communication**

A critical component to *Taking Lehigh to the World and Bringing the World to Lehigh* is communication. We have all seen the power of social media in the last year as messages are communicated quickly around the world with significant outcomes.

It is essential to reinforce the message regarding Lehigh’s decision to use the holistic approach for the internationalization of our campus and continue the efforts of informing and engaging internal (faculty, staff, students) and external (Alumni, BOT, partners and friends) constituencies. This can be accomplished through frequent messages and informing the campus community, our board of trustees, and the external constituencies about all of the interactive and ongoing international activities that involve our students and faculty and publicizing these successes in a professional, consistent, and timely manner using all communication venues available, i.e. web pages, Facebook, twitter, marketing publications, brochures, recruiting material.

Some examples of what has been done to date are below, but clearly much more needs to be accomplished, in particular the need for a communication expert/staff to dedicate part of his/her efforts to this task.
- **OIA WEBSITE** - Creation of a web site specifically for highlighting Lehigh’s international initiative and activities particularly highlighted through the world map tool.

- **New hard publication** - A brochure highlighting Lehigh’s international activities in 2010 with a follow up fact book being prepared for 2012.

- **Flash drive** - An innovative new mode of communication through the use of a flash drive that provide in depth information and overview of Lehigh in a very concise format.


**International Metrics and Future Challenges**

- The Global Lehigh Steering Committee (GLSC) Metrics Task Force created a set of 5 metrics within each of the four program priorities in Lehigh’s International Portfolio, which was approved by the university-wide Strategic Plan Implementation Group (SPIG). *An update on Lehigh’s Metric work is articulated in Appendix X.*

- In the 2011 NAFSA Report *Comprehensive Internationalization: Concept to Action*, by John K. Hudzik, the following paragraph extracted from the report defines three types of indicators: “There are reasons for measuring all three types of indicators. Input measurement provides an indicator of the level of investment made to create capacity to achieve a given set of outputs and outcomes (e.g., without study abroad program there is no capacity for participation and no opportunity for learning outcomes). Likewise, outputs measure that there is activity, not just capacity to act or do things (e.g., the numbers of students who enroll and complete programs). Outcomes measure what happens as a result—ultimately, for example, on student learning, abilities, careers, and so forth.” (Emphasis added).

- Lehigh recognizes that the metrics proposed so far focus on input and output indicators. We will be working on the greater challenge of developing metrics that measure ultimate outcomes as well.

- **Infusion of globalization in the Lehigh’s curriculum**: In the spring semester of 2011, the metrics committee initiated a comprehensive inventory effort to identify courses incorporating global perspectives within LU’s curriculum. All courses from the university catalog with descriptions that included the global or international perspectives were identified in the first phase of the inquiry process. Following this initial step, each program chair or department head was interviewed in order to clarify and/or amend the results to gain a better understanding of each department’s approach to incorporating a globalization perspective to the curriculum. Preliminary findings suggest that globally relevant content is infused within the course offerings in different ways. As some courses are specifically designed to address the global context, other courses may devote a portion of the class discussions and assignments to globally-focused material, and still other classes may not explicitly discuss the international context but address implications of the course content to global phenomena. The underlying message, projecting loud and clear from interviews with the faculty members, is that there is great effort, enthusiasm, and appreciation for incorporating global content within classroom activities, and there is a collective openness to further internationalization of the curriculum. The full study will be completed in the spring 2012 semester.

- **UCosmic and data collection**: The Metrics Task Force recognized that once all of the definitional issues have been settled, data sources identified, and systematic data acquisition processes put in place, we will face a data management, accessibility, and reporting challenge. To that end, Lehigh University has joined a consortium of 7 institutions of higher education and private sector enterprises to collaborate on the development of a data management and display system which will be optimized to handle data associated with international efforts at the University level. The system, called UCosmic, first emerged in prototype form at the University of Cincinnati, and soon became a collaborative effort between the University of Cincinnati and the SUNY system. It is now being overseen by the consortium. *A short description of UCosmic is also given in Appendix X.*
APPENDIX I
Lehigh Partnerships

China
1. East China University Science and Technology – 2005 and renewed in 2010
2. Southeast University (2011)
3. Tongji University (2011)
4. University of Science and Technology (2011)
5. Beijing Normal University – (Proposed for 2012)

South East Asia
  ❖ Malaysia
    7. Universiti Teknologi MARA (UiTM) (2009)
    9. Universiti Teknologi PETRONAS (UTP) 2010
    10. University Teknologi Malaysia (UTM) (in progress 2012)
  ❖ Indonesia
  ❖ Singapore
    12. Nanyang Technology University, (NTU) (in progress 2012)

Europe

Russia

United Nations
15. Department of Economic and Social Affairs of the United Nations (Proposed 2012)
APPENDIX II
Criteria for Selecting International Partners and Proposed Areas of Collaboration
(Developed by the Lehigh University Delegation to China, 15 February 2011)

• Criteria for selecting International Partners

1. The ability to meet most/all of the Lehigh international needs as articulated in the four program priorities documented within the Lehigh International Portfolio which are:
   • International Experiences for Students (UG and Graduate)
   • International Connections
   • LU Destination for International Faculty, Students, and Visitors
   • Internationalization of Lehigh University
2. A strong potential for broader impact on the institution, as a whole, versus individual faculty-to-faculty relationships.
3. The ability to sustain the partnership for an extended period of time.
4. Ensure there is a common understanding of the expectations of being an institutional partner with a Memo of Understanding (MOU) that reflects this understanding.
5. The partner institution shows an equally strong interest in entering into a partnership with Lehigh and there is a clear indication of the areas of common interest between Lehigh and the partner institution.
6. The schools selected should not only compliment Lehigh’s international portfolio but should also complement each other and have a level of compatibility.
7. Establish a working group at Lehigh and at the partner institution who will be responsible for the health and well-being of the partnership. Whenever possible this facet should be included in any MOU signed by Lehigh.
8. Partners should visit each other’s institution prior to finalizing the MOU and partnership agreement.

• Proposed Areas of Two Way Collaboration with Lehigh Partners

Two-way faculty-led and research collaboration

Faculty Cooperation:
• Two-way exchange/visiting professorships
• Curriculum development and co-teaching in specific fields
• Use of IT for idea exchange & joint program development and delivery

Research Collaboration:
• Focused on areas of mutual interest & joint publications
• Sharing of country-specific empirical data (Business & Education)
• Sharing of specialized instrumentation (Science & Engineering)
• Joint research proposals for external funding

Advanced Graduate Studies:
• Two-way exchange of graduate students
• Joint student supervision of Ph.D. students (Sandwich Program)
• Master graduate studies and certificate programs

Undergraduate program partnerships

International Experiences:
• Student/Faculty collaboration in area studies such as American Studies/Asian Studies
• Participation in Lehigh’s Globalization and Social Change Studies program

Summer Programs:
• Joint faculty-led international experience for Chinese/American students
• Global Innovation and Leadership Residency – Pilot Program
• Global Village for Entrepreneurial & Leadership skills.
APPENDIX III
Overseas Trips by Lehigh Faculty Delegations and Individual Faculty Members

- **Lehigh Delegation Trips**
  - The *Purpose is to establish institutional partnerships as platforms in key regions overseas for launching joint international activities involving faculty, staff, research, study abroad, and other educational programs, as well as follow up on active institutional agreements/relationships and the programs that are being held. A delegation is typically comprised of 5 – 9 members, mostly faculty and one or two staff members.*
    - October 2008 – Malaysia
    - May 2010 – Singapore, Indonesia, and Malaysia
    - October 2010 – Singapore, Indonesia, and Malaysia
    - January 2011 – China
    - April 2011 – *US-Indonesia Partnership Program (USIPP)* Indonesia
    - October 2011 – China
    - January 2012- Malaysia/Indonesia
    - September 2012 – China (proposed)
    - December 2012 – India (proposed)

- **Individual Faculty Trips**
  - The purpose is to follow-up on a specific action(s) from Delegation Activities
    - Malaysia:
      - 2009, 2010 & 2011: Jerry Lennon
      - 2011: Hugo Caram and Greg Tonkay
    - Singapore:
      - 2010 & 2011: Jerry Lennon
      - 2011: Mayuresh Kothare and Hugo Caram
    - Indonesia:
      - 2010 & 2011: Jerry Lennon
    - China:

APPENDIX IV
Recipients of Lehigh Faculty Grants for International Connections

- **May 2010 - Recipients**
  - A Peet Hickman (Physics) – Universite de Montpellier, FRANCE
  - Nikolai Nikolov (Art & Architecture) – Heidelberg Cement, GERMANY
  - Matthew Sanderson (Sociology & Anthropology) – Universite de Neuchatel, SWITZERLAND
  - Tanya Sanders(Sociology & Anthropology) – Universidade Federal Fluminense, BRAZIL

- **March 2011 – Recipients**
  - Cathy Ridings (Management) – National University of Ireland, IRELAND
  - Zicheng Yu (Earth 7 Environmental science) – Max Planck Institute, GERMANY
  - Nandini Deo (Political Science) – Gateway House, INDIA
  - Michael Burger (Biological science) – University of Leipzig, GERMANY
  - Masashi Watanabe (Materials) – Toyota Central R&D Laboratories, JAPAN
  - Gordon Bearn (Philosophy ) – Universidad Catolica del Peru- PERU
## APPENDIX V
### Lehigh Footprint Around The World by Numbers

*As of February 15, 2012*

### Grand Totals for all Regions

- **International Connections:** 2,172
- **International Experiences for Students:** 650
- **LU--Destination for International Faculty Students, and Visitors:** 958

*Note: Faculty International Activities Data is from a 2009 survey with 140 responses; Alumni numbers include alumni living and/or working abroad*

**Note:**
- Fulbright GS = Graduate Student
- Fulbright VS = Visiting Scholar
- MOU = Memo of Understanding (institutional)
- A = Individual Agreement
- SA = Study Abroad
- UI= Undergraduate International Student
- GI = Graduate International Student

### North Africa: 14

- **International Connections:** 2 alum; 7 Faculty International Activities
- **International Experiences for Students:** 1 SA
- **LU--Destination for International Faculty, Students, and Visitors:** 1 UI; 2 GI; 1 Fulbright GS

### Sub-Saharan Africa: 114

- **International Connections:** 47 alum; 2 LU Professor Fulbright Scholars; 18 Faculty International Activities
- **International Experiences for Students:** 30 SA
- **LU--Destination for International Faculty, Students, and Visitors:** 7 UI; 6 GI; 4 Fulbright GS

### Central America: 224

- **International Connections:** 85 alum; 19 Faculty International Activities
- **International Experiences for Students:** 103 SA
- **LU--Destination for International Faculty, Students, and Visitors:** 11 UI; 4 GI; 2 Fulbright GS

### East Asia: 1,177

- **International Connections:** 465 alum; 5 MOU; 6 A; 1 LU Professor Fulbright Scholar; 2 LU visits; 40 Faculty International Activities
- **International Experiences for Students:** 87 SA
- **LU--Destination for International Faculty, Students, and Visitors:** 136 UI; 399 GI; 26 Step Up; 8 visited LU; 2 Fulbright GS

### Eastern Europe and Central Asia: 310

- **International Connections:** 141 alum; 1 MOU; 1 visit to; 31 Faculty International Activities
- **International Experiences for Students:** 46 SA
- **LU--Destination for International Faculty, Students, and Visitors:** 30 UI; 45 GI; 3 Step-Up; 1 visited LU; 10 Fulbright GS; 1 Fulbright VS
Middle East: 181

International Connections: 106 alum; 1 LU visit; 25 Faculty International Activities
International Experiences for Students: 26 SA
LU--Destination for International Faculty, Students, and Visitors: 5 UI; 7 GI; 5 Step Up; 4 visited LU; 1 Fulbright GS; 1 Fulbright VS

North America 206

International Connections: 1 MOU; 138 alum; 3 A; 38 Faculty International Activities
LU--Destination for International Faculty, Students, and Visitors: 11 UI; 15 GI

Oceania: 75

International Connections: 39 alum; 11 Faculty International Activities
International Experiences for Students: 23 SA
LU--Destination for International Faculty, Students, and Visitors: 2 GI

South America: 192

International Connections: 125 alum; 5 A; 1 Lehigh Professor Fulbright Scholar; 28 Faculty International Activities
International Experiences for Students: 14 SA
LU--Destination for International Faculty, Students, and Visitors: 8 UI; 8 GI; 1 visited LU; 2 Fulbright GS

South Asia: 216

International Connections: 90 alum; 1 LU visit; 1 Lehigh Professor Fulbright Scholar; 18 Faculty International Activities
International Experiences for Students: 7 SA
LU--Destination for International Faculty, Students, and Visitors: 15 UI; 80 GI; 1 Step Up; 3 Fulbright GS

Southeast Asia: 319

International Connections: 197 alum; 4 MOU; 2 A; 5 LU visits; 25 Faculty International Activities
International Experiences for Students: 29 SA
LU--Destination for International Faculty, Students, and Visitors: 23 UI; 26 GI; 4 visited LU; 3 Fulbright GS; 1 Fulbright VS

Western Europe: 752

International Connections: 332 alum; 1 MOU; 12 A; 1 LU Professor Fulbright Scholar; 83 Faculty International Activities
International Experiences for Students: 284 SA
LU--Destination for International Faculty, Students, and Visitors: 14 UI; 11 GI; 8 visited LU
APPENDIX VI
Opportunities Abroad for Undergraduate Students:
An Innovative and Diverse Suite of Possibilities

Value Added to Lehigh Students Learning Experience

Two key elements of a student’s successful education at Lehigh, in addition to the classroom experience, are international experiences and practical hands-on experience. Lehigh University, with its combined emphasis on globalization and student success, as well as, bridging theory to practice, is well suited to bring these essential components together through international experiences abroad. In addition to the traditional one semester and one year study abroad, Lehigh provides the students with a suite of short-term international programs (ranging from 2-10 weeks during the winter and summer vacations) that provide the students with immersion in the culture of a foreign country while experiencing work, research or service in a global context. Creating robust international experiences for undergraduate students in which they will learn first-hand about the global nature of business, research, and social entrepreneurship ensures that Lehigh graduates have the tools to succeed and lead in a global economy.

Summary of Opportunities Abroad for Undergraduate Students

Current and Sustainable Program Models

1. Semester and Year-long Study Abroad

Lehigh offers over 200 programs in over 60 countries, and sends approximately 180 students on traditional study abroad annually, accounting for approximately 30% of all international experiences. The diverse mix of destinations and disciplinary foci ensures that there is a program that meets each student’s needs, regardless of their academic, personal, and professional objectives. Semester study abroad programs carry a full course load of 12-16 transfer credits and often include field study, research, or internship opportunities, in addition to coursework. Students work closely with their academic college, department, and advisor(s) to coordinate their course work abroad, gaining approval for courses to count towards their major, minor, and graduation requirements. Semester programs are conducted at universities abroad through exchange agreements or by American based non-profit organizations, commonly referred to as partner institutions. Lehigh holds 13 exchange agreements with schools around the world. The remaining approved programs are coordinated through partnerships with American based non-profit Study Abroad partner organizations. These groups coordinate applications and onsite orientations, and usually have their own in-country staff.

2. Lehigh-led Study Abroad

Lehigh offers a multitude of short-term, study abroad programs taught off-load by standing members of the Lehigh faculty during the summer and winter months, which account for nearly 50% of all international experiences by LU undergrads. Individual program length may from approximately 2 weeks in the winter to 7 weeks in summer. Regular, longstanding, and annual programming includes:

<table>
<thead>
<tr>
<th>Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costa Rica</td>
<td>Beijing/Shanghai – Chinese Bridge Project</td>
</tr>
<tr>
<td>Martinique</td>
<td>Belgium*</td>
</tr>
<tr>
<td>Munich</td>
<td>Ireland*</td>
</tr>
<tr>
<td>Spain</td>
<td>Paris</td>
</tr>
<tr>
<td></td>
<td>Prague*</td>
</tr>
<tr>
<td></td>
<td>Shanghai*</td>
</tr>
<tr>
<td></td>
<td>Vicenza</td>
</tr>
</tbody>
</table>

* Denotes programs which offer a credit-bearing internship, practicum, or research project.
Similar to a trend in higher education nationwide, Lehigh University is seeing rapid growth in the number of students seeking and taking part in short-term international experiences classified as an internship, practicum, or research project. Smaller projects directly supervised by Lehigh faculty in an abroad setting, such as the Lehigh in Mali program, are also available; this work typically ties into current research in the field, and may result in scholarship that is either presented in a public forum or published in some manner. All opportunities target not only professional majors, but are drawing increased interest from students coming from the College of Arts and Sciences, particularly social sciences majors. Recently introduced programs include: Lehigh in Munich (Architecture), Lehigh in Zambia (CSB), and Lehigh in Mali (Anthropology). Lehigh in Prague (Music) will run for the first time in 2013.

3. Martindale Student Associates Program

The Martindale Student Associates Program has enabled a select group of Lehigh juniors and seniors to actively explore global business and economic issues each year since 1980. The Student Associate experience extends the scope of learning beyond the pages of textbooks and journals through travel to organizations around the world, and interviews and meetings with decision makers, distinguished executives, and scholars. Each year a new group of junior-year Student Associates begins to explore a particular topic about a country outside the U.S. To gain first-hand experience of the society under study, the students take part in an extensive educational field trip organized by their faculty advisors in conjunction with faculty from other disciplines. Over the years they have traveled to Mexico, Canada, Argentina, France, Germany, England, the Czech Republic, Chile, Austria, Switzerland, Ireland, Hong Kong, Sweden, Spain, Hungary, Panama, the Benelux countries, New Zealand, Turkey, Iceland, and Greece, and this year they will travel to Columbia. The senior year includes a two-semester course dedicated to researching and writing a paper about business or economic issues in the country under study. The students' papers are published annually in Perspectives on Business and Economics, the undergraduate journal of the Center, which is distributed to over 1,500 people and libraries in the U.S., Canada, Europe, and South America.

4. Engineers without Borders

Engineers Without Borders (LU-EWB) is a multidisciplinary group of students dedicated to learning about and tackling issues of global poverty, international development, and sustainability. LU-EWB is a non-profit humanitarian organization established to partner with developing communities worldwide in order to improve their quality of life. This partnership involves the implementation of sustainable engineering systems that developing communities can own and operate without external assistance, thereby empowering such communities by enhancing local, technical, managerial, and entrepreneurial skills. These projects are initiated by, and completed with, contributions from the host community working with our project team. LU-EWB focuses on low cost, high impact projects. To promote sustainability the organization partners with host communities on projects so that the communities can manage the systems autonomously in the future. Another goal of the organization is to give students real world experience that will help them think critically and communicate with other cultures. The project gives students a range of experience from international relations to technical engineering skills.

5. Global Citizenship

The Global Citizenship Program is a cross-college, multi-disciplinary certificate program designed to accommodate students from all fields, including engineering and science, business, arts, humanities and social sciences. Envisioned as a "backpack" or a set of courses and experiences that any student can fit into her/his major, the program requires students to examine the questions of meaning and value associated with the theme of citizenship within today's global world. In addition to the curricular elements of the program, students are required to engage in at least two experiences abroad (one of which is during sophomore year, and mostly covered by a scholarship), and are provided with opportunities for leadership and co-curricular activities on campus.
6. Embedded Programs

Lehigh is increasingly taking advantage of programming embedded within a semester, which allows for students to take part in a credit-bearing program while not having to spend an entire semester abroad, or attend the prohibitively expensive winter and summer Study Abroad programs. These abroad experiences are linked to an academic course and led by Lehigh faculty. To date Lehigh has run three of the programs, with COE-Cambodia and Lehigh in Singapore running into their fourth year of programming, and Lehigh in Israel running in its second year, all subsidized by external and internal funding.

New, Innovative and Under Development Program Models

7. The Lee Iacocca International Internship Program (LIIIP)

LIIIP is the result of a gift from Lee Iacocca, and provides an array of international work experiences for Lehigh students that include international internships, co-ops, research experiences, and cohort internships. The program will kick-off in Summer 2012, sending 11 students on individual internships worldwide, and six students to Costa Rica for a cohort experience. LIIIP is designed to augment the existing portfolio of international experiences available to Lehigh undergraduate students, and the internships are intended for newly created programs and not those in the suite of opportunities now available, such as Lehigh-led study abroad and other credit-bearing international experiences. Students are selected through a highly competitive campus wide process, and must generally show financial need and never have been abroad on a Lehigh-sanctioned program. If the complete financial goals of endowment and contribution agreement are met, Lehigh will send up to 150 students abroad annually through this program.

8. Affinity Group and Departmental-based Programs

An increasingly popular form of programming on campuses nationwide is what may be referred to as Affinity-based Programming. This programming, generally, has a target population, and generally requires fundraising and subsidies in order to run. Examples of these are:

- LGBT Iceland, a service and experiential learning programming running for the first time in spring 2012;
- SALSC (Student Athletes Leading Social Change), a program that has run for the last two years in Bolivia and Zimbabwe;
- Women’s Volleyball in China, a training and service learning based program that will run for the first time in Summer 2012;
- Philharmonic Abroad and Chorus Abroad, programs that run biennially and in opposite years, and have taken large numbers of students abroad over the years;
- TESOL China, a practicum-based program which will take students to China for a short-term experience in teaching ESL, and which may run for the first time in summer 2012;
- Men’s Soccer in Spain, a training and service learning based program that may run for the first time in winter 2012-13;

9. International Research Practicum

A research based summer or a semester program at one of Lehigh’s partner university overseas. One example is the summer program at the National Technology University (NTU) in Singapore involving Lehigh Chemical Engineering undergraduate students. This program runs annually and is, in part, funded by NTU.
10. Service & Experiential Learning Abroad

Students nationwide and at Lehigh are increasingly looking for alternative ways to engage themselves in abroad experiences, because, for many, the traditional study abroad approach is too costly or cannot be fit into their curriculum. Lehigh International service-learning challenges this demographic by providing intense, hands-on, short-term international experiences for undergraduate and graduate students seeking a Lehigh staff/faculty-led program at a low cost. Participants spend 10-15 days exploring and connecting to local community partners and unpacking their day-to-day “raw” experiences through service projects established by community leaders, guided group meetings, cultural immersion, reflection, and journaling. Programs are, also, strongly encouraged to present a follow-up project to the Lehigh campus upon return. Examples include Antigua-Barbuda (commenced in summer 2011), Costa Rica (to be launched in summer 2012), and LGBT-Iceland (running for the first time in Spring 2012).

11. Theme-based Cohort International Experience

A cohort of Lehigh undergraduate students and equal number of students from a partner institution overseas (a university or NGO) working together on a theme program under the joint guidance of faculty/staff from both institutions. The themes may be related to the Grand Challenges such as environment, energy, health, and physical and virtual security infrastructure. One example is the 2011 summer pilot program on Democratic Society & Religious Pluralism, involving a cohort of an equal number of students from Indonesia and the US from three universities, Lehigh University, University of Michigan, and University of Gadjah Mada (Yogyakarta, Indonesia) supervised by faculty and staff from participating institutions. The program involves two rotations for the entire cohort of students/faculty/staff; the first rotation in Indonesia and the second in the US. This program will run again in 2012 with the addition of a fourth partner, the University of Indonesia in Jakarta.

12. Summer International Practicum Cohort in Industry

A three-way partnership between Lehigh University, a partner University overseas, and a multinational American corporation to provide a cohort of students with equal numbers of students from Lehigh and the partner University with a work & learn experience in both the host country and the US. The program involves two rotations; one overseas and one in the US, supervised by faculty members from the participating universities and a staff member from the corporation. Two prototypes are being developed with Lehigh’s partner institution in China; one involving Air Products & Chemicals, and the second with Becton and Dickinson and Company.
### APPENDIX VII
Regions of Origin of Lehigh’s Undergraduate Students

**Regions for International Undergraduate Students (2007 - 2011)**

<table>
<thead>
<tr>
<th>Region</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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<td>7</td>
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<tr>
<td>East Asia</td>
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APPENDIX VIII
Regions of Origin of Lehigh’s Graduate Students

Regions for International Graduate Students (2007 - 2011)

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<th>North America</th>
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<th>South America</th>
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<th>Eastern Europe</th>
<th>Middle East</th>
<th>Africa (North)</th>
<th>Africa (Sub-Saharan)</th>
<th>Southeast Asia</th>
<th>South Asia</th>
<th>East Asia</th>
<th>Oceania</th>
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<td>2007</td>
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### APPENDIX VIIB & VIIIB
#### Regions and Countries of Origin of Undergraduate and Graduate Students

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<th>Undergraduate Countries by Region</th>
<th>Graduate Countries by Region</th>
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<tr>
<td>Canada 14</td>
<td>Canada 54</td>
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<td>Central America 60</td>
<td>Central America 11</td>
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<td>Costa Rica 10</td>
<td>Antigua and Barbuda 2</td>
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<td>Mexico 12</td>
<td>Mexico 3</td>
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<td>Trinidad and Tobago 1</td>
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<td><strong>South America 69</strong></td>
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<td><strong>Europe 5</strong></td>
<td><strong>European Union 218</strong></td>
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</table>
# APPENDIX IX

## International Delegations visiting Lehigh University (2009 – 2012)

### China: 16

<table>
<thead>
<tr>
<th>Institution</th>
<th>Date</th>
</tr>
</thead>
<tbody>
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<td>CSUFT—Central South University of Forestry &amp; Technology</td>
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</tr>
<tr>
<td>Shanghai Foreign Service Co, LTD</td>
<td>September 20, 2010</td>
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<td>ECUST</td>
<td>November 16 &amp; 17, 2010</td>
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<td>Univ. of Science &amp; Technology, Beijing</td>
<td>November 23, 2010</td>
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<tr>
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<tr>
<td>Univ. of Science &amp; Tech. of China</td>
<td>April 11 &amp; 12, 2011</td>
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<tr>
<td>Peking University</td>
<td>May 12 &amp; 13, 2011</td>
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<tr>
<td>Southeast University</td>
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<td>East China Normal University</td>
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<td>Universidad de los Andes</td>
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<td>Escuela Politecnica del Ejercito</td>
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<td>Cairo University</td>
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<td>Univ. Duisburg-Essen, Germany</td>
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<tr>
<td></td>
<td>Jakarta Int'l College (JIC)</td>
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Executive Summary

The adoption of Lehigh’s Strategic Plan with its “Grand Challenge: Globalization” as well as the establishment of the Office of International Affairs (OIA), have both served to elevate the University’s international efforts to a new level. Recognizing the obligation to track progress and success in this area, several campus working groups addressed the task of identifying appropriate metrics for this purpose. Proposed primarily by the Global Lehigh Steering Committee’s Metrics Task Force and ultimately endorsed by the Strategic Plan Implementation Group, four to five metrics were identified for each of OIA’s four program priorities.

The challenge now will be to gather and manage the appropriate data (aided by an external international data management system which Lehigh is helping to develop) and integrate these measures into an existing reporting dashboard, all the while keeping an eye on Lehigh’s performance in external ranking systems.

Background

The Strategic Plan and OIA

In 2009, Lehigh University finalized its most recent Strategic Plan. Among the Plan’s four major components were three Grand Challenges, one of which was “Globalization.” That same year, Lehigh established the Office of International Affairs (OIA) and appointed Dr. Mohamed El-Aasser to the newly created leadership position, Vice President for International Affairs. OIA quickly established the following Mission Statement:

*To further globalize Lehigh’s mission of advancing learning through the integration of teaching, research and service to others through a systematic and sustained engagement between the Lehigh Community and the World-At-Large.*

As a means of fulfilling that mission, they identified two overall goals …

- *Internationalization of Lehigh Community*
- *Expanding Lehigh’s International Footprint*

… and four program priorities to reach these goals:

- *International Connections*
- *International Experiences for Students (Undergraduate and Graduate)*
- *LU – Destination for International Faculty, Students, and Visitors*
- *Internationalization of Lehigh University*

Campus Working Groups and Metrics

Shortly after the publication of the Strategic Plan, several on-campus groups began discussing the means by which we might measure the Plan’s progress and success.

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3 An online version of the Strategic Plan can be found at http://www.lehigh.edu/2009plan/.
4 More information about OIA can be found at http://www.lehigh.edu/international/invpia.html
1. The President created the Strategic Plan Implementation Group (SPIG), which in turn spun off several working groups, one of which being charged with thinking about the metrics that might be utilized to assess progress and success in the Grand Challenge: Globalization.

2. The Vice President for Finance and Administration and the Deputy Provost for Academic Affairs created the Institutional Assessment Group (IAG), which addressed the assessment strategies for the Strategic Plan as well as those for the 2013 Middle States Periodic Review Report.

3. OIA created the Global Lehigh Steering Committee (GLSC), which in turn created a Metrics Task Force charged specifically with defining the metrics to be utilized to assess OIA's success in fulfilling its mission.

Metrics Internal to Lehigh University

The Metrics

In the end, primarily through the efforts of the GLSC Metrics Task Force, and ultimately approved by SPIG, the following metrics were adopted within each of the program priorities listed above:

(1) International Connections
   a. LU faculty international activities
   b. Lehigh memos of understanding
   c. LU international alumni
   d. International fund raising
   e. International rankings

(2) International Experiences for Students
   a. UG international experience (credit bearing)
   b. UG international experience (non-credit bearing)
   c. Graduate student international activities
   d. Fulbright outbound students

(3) LU Destination for International Faculty, Students, and Visitors
   a. International UG enrollment
   b. International GR enrollment
   c. Short term inbound international students
   d. Fulbright inbound GR students
   e. International scholars/researchers

(4) Internationalization of Lehigh University
   a. Domestic international-based programs
   b. International scholars/researchers
   c. International components in the LU course offerings
   d. Media presence (internal & external)
   e. Fulbright scholars (inbound and outbound)

The Challenges

There are several challenges here. First, despite the fact that “Globalization” is a complex and multidimensional construct, serious effort was made to keep the number of metrics to be tracked manageable.

Second, while some of these variables have readily available data that are in fact already being tracked, some have associated data that are maintained outside of the University’s central data management system (Banner), some are not maintained at all, and some of these constructs require further operational definitions.

Third, once all of the definitional issues have been settled, data sources identified, and systematic data acquisition processes put in place, we will face a data management, accessibility, and reporting challenge. To
that end, Lehigh University has joined a consortium\(^5\) of institutions of higher education and private sector enterprises to collaborate on the development of a data management and display system which will be optimized to handle data associated with international efforts at the University level. The system, called UCosmic, first emerged in prototype form at the University of Cincinnati, soon became a collaborative effort between the University of Cincinnati and the SUNY system, and is now being overseen by the consortium.

Finally, since the Fall of 2009, OIA has been sharing data with the Global Affairs Subcommittee of the Board of Trustees via an “International Dashboard” - data which reflect Lehigh’s international efforts. While some of the metrics proposed above appear on the current Dashboard, not all do. And while some of the variables that appear on the current Dashboard are among those proposed above, not all are. Consequently, a task that lies before us involves the evolution of the means by which we continue to share with the Board our international key performance indicators.

**Metrics External to Lehigh University**

Rankings of national universities by domestic agencies (such as *US News*) have been with us for a considerable period of time. Rankings of world universities by agencies external to the United States on the basis of their “international-ness” are relatively new on the scene. While Lehigh continues to place well when assessed for overall “quality” by domestic agencies (uniformly in the top 40 nationally according to *US News*, for example), we do not do as well in the international rankings.

Because of the fledgling nature of international rankings, there are currently many attempts\(^6\) at this service with varying degrees of quality. The two international ranking schemes that are emerging as the leaders in this field are:

- World University Ranking (Times Higher Education Supplement)
- Academic Ranking of World Universities (Shanghai Jiao Tong University)

Regarding the rankings that come from Shanghai Jiao Tong University, while Lehigh’s rank has, in recent years, remained in the 401 - 500 range internationally and the 140 - 150 range nationally, it must be noted that these rankings are based 30% on the number of faculty and alumni winning Nobel Prizes and Fields Medals, 20% on articles published in the very prestigious journals *Nature* and *Science*, and 20% on the number of citations of the University’s publications provided by only a single - and rather limited - citation source.

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\(^5\) As of August 2011, the consortium membership is as follows:

- The College Board (United States)
- Institute of International Education (United States)
- Terra Dotta/StudioAbroad (United States)
- Beijing Jiaotong University (China)
- Edinburgh Napier University (Scotland)
- Future University in Egypt (Egypt)
- Griffith University (Australia)
- Lehigh University (United States)
- Mackenzie Presbyterian University (Brazil)
- Manipal Education (Antigua, Dubai, India, Malaysia, Nepal)
- State University of New York (United States)
- Universidad San Ignacio de Loyola (Peru)
- University of Cincinnati (United States)
- University of Minnesota (United States)
- The University of New South Wales (Australia)

\(^6\) See, for example, “*Lehigh University and International Rankings: An Update*” prepared for the Global Affairs Subcommittee in October, 2009, as well as two follow-up analyses prepared for the Office of International Affairs.
Regarding the rankings that come from the Times Higher Education (THE) Supplement, comparisons across more than two years are problematic as THE recently changed both their methodology and the agency they employ to actually conduct the survey. Lehigh is currently ranked 335 internationally, but once again, the rankings are based on very limited data. 30% of the total score is based on “Teaching” (50% of which is based on a reputation survey), 30% is based on “Research” (60% of which is based on a reputation survey), and 32.5% is based on “Research Influence” (all of which is based on a single - and rather limited - citation source).

To paraphrase what President Gast once said in conjunction with the US News & World Report ranking of the “Best National Universities”:

*First and foremost, Lehigh will continue to submit data that have integrity. In our on-going efforts to help the rankings accurately reflect the quality of our institution, we will continue to devote energy and resources to those areas considered, provided that such actions are in the best interest of the University as a whole.*

**Next Steps**

In *Comprehensive Internationalization: Concept to Action*, John K. Hudzik defines three types of indicators:

“There are reasons for measuring all three types of indicators. Input measurement provides an indicator of the level of investment made to create capacity to achieve a given set of outputs and outcomes (e.g., without study abroad programs there is no capacity for participation and no opportunity for learning outcomes). Likewise, outputs measure that there is activity, not just capacity to act or do things (e.g., the numbers of students who enroll and complete programs). Outcomes measure what happens as a result—ultimately, for example, on student learning, abilities, careers, and so forth.” (Emphasis added)

Lehigh recognizes that the metrics proposed in this report focus on input and output indicators. We will be working on the greater challenge of developing metrics that measure ultimate outcomes as well.