

Global Perspectives: Graduate Students' Experiences with Global Higher Education

Mr. Gary K. Nave Jr., Virginia Tech

Gary Nave is a Ph.D. student in the Engineering Mechanics program at Virginia Tech, working on invariant manifolds and flow-structure interaction. He is passionate about teaching students in the fields of dynamical systems and fluid mechanics. He is also passionate about global education, stoked by the Global Perspectives Program through trips to Switzerland and Ecuador. From Virginia originally, he completed his Bachelor of Science degree in Engineering Science and Mechanics at Virginia Tech. He currently serves as the Director of Programs for the Graduate Student Assembly and is the founding president of the Graduate Engineering Mechanics Society, both at Virginia Tech.

Ms. Amy L. Hermundstad, Virginia Tech

Amy Hermundstad is a doctoral student and Graduate Research Assistant at Virginia Tech. She received her B.S. in Mechanical Engineering from Colorado State University and is currently pursuing an M.S. in Mechanical Engineering and a Ph.D. in Engineering Education. Her research interests include the professional development of engineering students through out-of-class activities.

Michael Stewart, Virginia Tech

Michael Stewart (Ph.D. candidate, Third Lab, Center for Human-Computer Interaction, Dept. of Computer Science, Virginia Tech) conducts research on the micro-coordination – tight coupling of behavior to possibility in the moment – of individuals with each other and technology in co-located and remote settings. He employs Research Through Design to explore how ICTs function to facilitate our feelings of togetherness. This interest stems from and supports his work designing, building and researching assistive and educational technologies.

Ms. Michele Ruth Waters, Virginia Tech

Michele Waters is a PhD student in the Biomedical Engineering (SBES/BEAM) department at Virginia Tech. Originally from New York, Michele attended SUNY Stony Brook and CUNY City College (Grove School of Engineering) for her B.S. and M.S. in Biomedical Engineering. Michele is currently investigating the role of inflammation (macrophage differentiation) in traumatic brain injury; she is also evaluating the potential of human hair-derived keratin biomaterials to promote an anti-inflammatory environment, thereby improving clinical outcomes for patients. Michele is a member of the New Horizons Graduate Scholar program and has served on the Initiative for Maximizing Student Development (IMSD) Selection Committee at Virginia Tech. She is committed to improving diversity in higher education, creating mentoring opportunities, and hopes to continue recruiting women and minorities into STEM fields.

Emily Garner, Virginia Tech

Emily Garner is a PhD student studying Civil and Environmental Engineering at Virginia Tech. Her research interests include sustainable drinking water and wastewater treatment, fate and transport of emerging microbial contaminants, and water quality in distribution systems.

Mohammed Seyam, Virginia Tech

Mohammed Seyam is a Computer Science doctoral candidate in the College of Engineering at Virginia Tech. He received his Bachelor's degree in Information Systems from Mansoura University and his Master's degree in Information Systems from Cairo University, both in Egypt. His work is focused on Software Engineering, Computer Science Education, Usability Research, and Mobile Software Development. Seyam served as the 2015-16 Graduate Student Representative to the Board of Visitors, where he worked as a liaison between the graduate student population and the governing authority of the university. Among his other activities at Virginia Tech, Seyam served as a Global Ambassador, helping welcome new international students to the Virginia Tech community. He was a member of the Computer Science Graduate

Council, as well as the Center for the Arts international advisory board. As a participant in the Global Perspectives Program, Seyam traveled with the Graduate School to France, Switzerland, Italy, and Ecuador to study different higher education systems around the world. Seyam is also a Fellow of the Graduate Academy for Teaching Excellence, and he earned the Graduate Certificate of Preparing Future Professoriate in 2016.

Ms. Chelsea R. Corkins, Virginia Tech

Chelsea is currently an Agriculture Extension Specialist at Virginia Tech. She works closely with two extension programs - one adult and one high school level - through program development, curriculum design, and outcome assessment. Chelsea holds a BS and MS degree from Kansas State University both in Biological and Agricultural Engineering and will be rejoining the graduate student world by beginning a second master's degree in the fall with an emphasis in interdisciplinary program and curriculum development.

Dr. Karen P. DePauw, Virginia Tech

Karen P. DePauw serves as Vice President and Dean for Graduate Education and holds academic appointments as tenured Professor in the Departments of Sociology and Department of Human Nutrition, Foods & Exercise at Virginia Tech in Blacksburg, Virginia. Since her arrival at Virginia Tech, her major accomplishments include success in building a strong, diverse and inclusive graduate community; establishing the national award-winning innovative Graduate Life Center (GLC); and implementing the signature academic initiative known as Transformative Graduate Education (TGE), including the global perspectives and preparing the future professoriate programs.

Global Perspectives: Graduate Students' Experiences with Global Higher Education

Abstract

The Virginia Tech Graduate School offers a unique and powerful international program to prepare future faculty for an increasingly globalized world. The Global Perspectives Program, established in 2005, has involved more than 130 Virginia Tech graduate students in its 12 year history. The program is intentionally multidisciplinary and has been formative for the engineering graduate students that have participated. As part of the 2016 cohort of the Global Perspectives Program, students traveled to Europe during May of 2016 to visit eight different universities in three countries. Through these visits, students were exposed to a wide range of perspectives and insights into higher education. In this paper, we provide an overview of the Global Perspectives Program and its history, describe the prerequisites and presentation, describe the events of the trip for the 2016 cohort, and conclude by sharing participants' reflections on their experiences. The Global Perspectives Program, with its focus on developing students' perspectives of higher education, can help prepare students for success in an increasingly globalized world.

I. Introduction

As the field of engineering becomes more globalized, the need for engineers to be globally competent is increasingly important. The development of global competency is particularly important for engineering graduate students, who will soon be leaders in industry and academia. Many of the challenges facing our society require global collaboration, and it is therefore necessary that engineering graduate students develop an ability to work in these global contexts [1]. However, many graduate engineering programs focus primarily on research and on developing students' technical skills with less emphasis on skills needed for students' jobs and careers after graduation [2-3]. Additionally, while graduate students often pursue careers in institutions of higher education, these students primarily have experience with research universities, despite the wide range of institutional types that exist [4]. Therefore, to be successful in a wide range of institutions and in a global society, graduate students benefit from gaining familiarity with a variety of types of institutions that exist around the globe.

To help students develop global competency and learn about higher education on a global scale, the Virginia Tech Graduate School offers an innovative program, known as the Global Perspectives Program (GPP), which enables graduate students in all disciplines to explore and discuss higher education both in the United States and around the world. GPP is a program which combines coursework with a study abroad experience to prepare future faculty members. Following the completion of required coursework, selected students travel to universities in Switzerland, France, and Italy to meet with administrators, faculty, staff, and students at a variety of European universities with different missions. Each year, the students focus their discussions around a particular theme designed to broaden perspectives of higher education.

The purpose of this paper is to provide an overview of the Global Perspectives Program and to discuss the reflections of engineering graduate students who participated in the program. In particular, this paper consists of four sections: the history of the program, program prerequisites, the events of the 2016 Global Perspectives Program, and student reflections.

II. History of the Global Perspectives Program

II.1. Origin and evolution

The Global Perspectives Program (GPP) was established at Virginia Tech by Karen DePauw in 2005. DePauw arrived at Virginia Tech in 2002 as Vice Provost and Dean of Graduate Education with an interest in building a Transformative Graduate Education initiative (TGE) that would mimic the success of the Future Professoriate program she successfully piloted at Washington State University. The TGE initiative at Virginia Tech would be designed to include several programs such as Preparing the Future Professoriate and Preparing the Future Professional, while incorporating diverse and international perspectives in education. This initiative would later form the basis for the Global Perspectives Program.

The development of the Global Perspectives Program (GPP) began in 2005 with a seized opportunity available through Virginia Tech. The university was already in possession of an educational site in Riva San Vitale, Switzerland, which included a historic residence, the “Villa Maderni.” Virginia Tech’s Outreach and International Affairs Office was interested in expanding the programs hosted at the villa. Dean DePauw seized the opportunity to broaden her growing TGE initiative to include a study abroad component at the villa. Unlike many of Virginia Tech’s study abroad programs, she recognized that graduate students pursuing terminal degrees and interested in an academic career would largely be unable to spend a full semester abroad, especially for the sole purpose of professional development and preparation for a career in higher education. Instead, Dean DePauw developed a 10-day summer program that aimed to expose graduate students to a diverse set of higher education institutions and their stakeholders. In addition to recognizing the importance of a shorter program duration to facilitate graduate student participation, Dean DePauw’s understanding of graduate student’s lives coupled with her passion for diversity and equity motivated her to limit the financial strain on program participants.

The GPP program began as a visit to several higher education institutions convenient to Virginia Tech’s villa in Riva San Vitale, Switzerland (now known as the Steger Center for International Scholarship at The Villa Maderni). Eventually, the program grew to include a reciprocal visit to the United States by two partner institutions: Universität Basel and Universität Zürich. Since its inception, the program has expanded to include three different regions. The original and longest running is “GPP Switzerland,” which was succeeded by “GPP Chile”, and, most recently, “GPP Ecuador.” The program has included visits to the following countries: USA, Switzerland, Italy, Germany, France, Chile, Ecuador, and Belgium with more than 25 participating institutions.

II.2. Implementation of the program

II.2.1. Participant selection

The Vice President and Dean for Graduate Education, Karen DePauw, personally selects the participants for the GPP program from the pool of applicants who have completed the

prerequisites (described below) and have submitted an application describing their interest. Among the primary selection factors are diversity of academic interests, diversity of participant background and perspectives, relative balance of gender identity, and past face-to-face interactions. In the interest of academic diversity, Dean DePauw attempts to select participants from as many of Virginia Tech's nine colleges as possible. Importantly, like all TGE initiative programs, GPP is intended specifically to target graduate students from all disciplines, rather than solely those studying education itself.

II.2.2. Funding

Selected participants in the 2016 cohort were guaranteed a stipend of approximately 900 USD for the purposes of travel for the program. This amount has changed over time as flight costs have changed. The program currently runs from a Sunday in late May to Wednesday evening, 10 days later. All lodging and transportation during these 10 days is fully covered by the program. This includes 11 nights of lodging, and travel via trains and buses for the purposes of the program's official itinerary. Additionally, with the exception of two grab-and-go lunches during travel, all meals are paid for by the program.

The cost of the program is approximately 50,000 USD annually. This includes those expenditures detailed above for approximately 15 participants and 2 staff members. This funding comes almost entirely from the budget of the Vice President and Dean of Graduate Education. The Virginia Tech Office of University Development has occasionally been able to support approximately one participant's expenses, and, in some years, the Provost's Office or President's Office have contributed to funding the program.

II.2.3. Site selection

The selection of the initial institutions included in the GPP study abroad was made out of practicality: they were the most diverse institutions that were affordable to visit, in time and budget, from Virginia Tech's Switzerland location. In the first year of the program, 2006, GPP visited Eidgenössische Technische Hochschule (ETH) Zürich, Politecnico di Milano (PoliMi), and Università della Svizzera Italiana (USI), and another unit of USI, the Accademia di Architettura di Mendrisio. In 2007, building on its first-year success visiting four institutions and leveraging professional social networks (especially our partner Erich Thaler), the GPP Switzerland program grew to also include visits to Universität Zurich and Universität Basel. The relationships with these two universities has continued to grow with Universität Basel beginning to offer an affiliated program for their own graduate students in 2010 and Universität Zurich following suit in 2016.

Universität Basel would not only create their own cohort to join part of Virginia Tech's GPP Switzerland program, but they would reciprocate with a visit to the United States, culminating with a trip to the Embassy of Switzerland in Washington, D.C. The Universität Basel would further develop the Global Perspective Program's relationships with other European higher education institutions, particularly those located in the Upper Rhine Region participating in EUCOR. The GPP Switzerland program now includes one of the oldest universities in Switzerland (Universität Basel, est. 1460), the top engineering school (ETH), the biggest university in Switzerland (Universität Zürich), the youngest university in Switzerland (USI, established 1995), and applied schools such as Fachhochschule Nordwestschweiz (Art and Design campus as well as the Jazz School) and Scuola universitaria professionale della Svizzera italiana (SUPSI).

II.2.4. Evolution

As the Global Perspectives Program has grown within Virginia Tech and gained external recognition [5], a variety of projects and programs have been initiated. Additional GPP experiences from Virginia Tech have been started to Chile and Ecuador. Universität Basel, and more recently Universität Zürich, have developed successful Global Perspectives Programs, as discussed previously. Learning of the Global Perspectives Program of the Virginia Tech Graduate School has aided Texas Christian University in developing the Global Outlooks in Education program [6], and a partnership with GPP Ecuador has led to the 21st Century Faculty Institute at the Universidad San Francisco de Quito [7]. To share the GPP experience with other institutions, Dean DePauw has taken a group of graduate deans from around the United States on a version of the GPP Switzerland trip. Additionally, the usage of social media, outlined in section III.3, in the Global Perspectives Program has led to the development of the custom web application TripVis.org [8]. New partnerships and programs are constantly being developed as the experiences of GPP are shared with various education communities around the world.

III. Global Perspectives Program: prerequisites

III.1. Global Perspectives Program: course preliminary requirements

There are two prerequisite courses that graduate students must successfully complete before applying for the Global Perspectives Program: Preparing the Future Professoriate and Pedagogical Practices in Contemporary Contexts (Contemporary Pedagogy). Preparing the Future Professoriate, taught by Dean DePauw, provides students with context and fundamental knowledge of modern issues they may face as a future faculty member in the United States or abroad. The semester begins with discussions about the structure of the university and faculty responsibilities within the university. The remainder of the semester gives an overview of higher education, including topics such as shifting student demographics, diversity and inclusion, the impact of technology in the classroom, ethical standards in research, and paradigm shifts in education and university policy.

In Preparing the Future Professoriate, students are encouraged to thoughtfully and purposefully engage with their peers through the course discussions. This is especially true in the lectures covering global perspectives in higher education. Since its inception, the course has attracted students from a variety of backgrounds around the world. International students in the course are invited to present on the educational formats, standards, and requirements of the early education and higher education systems in their home country. These presentations evoke a rich dialogue around differences and commonalities between education systems around the world. Throughout the semester, students are required to keep a weekly journal of their thoughts and experiences throughout the course, blog about their thoughts on specific topics, and initiate digital conversations on the blogs of their peers. At the conclusion of the semester, students write a report on a topic of their choice within higher education. This course integrates both verbal and written communication, allowing students to find their voice and express informed opinions in a variety of thoughtful and meaningful ways.

Like Preparing the Future Professoriate, Contemporary Pedagogy creates a space for graduate students from diverse backgrounds and disciplines to discuss and explore issues related to contemporary pedagogical praxis. With a focus on learner-centered pedagogy, Contemporary Pedagogy allows students to develop effective and inclusive teaching strategies, foster reasoning

skills through problem-based learning activities, and examine complex issues that educators face in the 21st century. The class is taught in an active-learning, technology-enriched classroom. Throughout the semester, students work closely in small groups to discuss a variety of readings, videos, and learning tools, ranging from the writings of Paulo Freire to the PBS documentary “Digital Media: New Learners of the 21st Century.” As deliverables for the course, each student creates a learner-centered syllabus for a course in their discipline, a teaching philosophy statement inspired by their own values and experiences, and a problem-based learning project. After each session, students blog and tweet about the readings, individual assignments, and implementation of what they have learned in the classroom. As a whole, the central function of Contemporary Pedagogy is to broaden the potential agency of future educators by fostering their understanding of the world, their ability to think critically, and their courage to pursue and inspire authentic learning using modern methods.

Combined, Preparing the Future Professoriate and Contemporary Pedagogy help prepare students to engage in meaningful and informed dialogue with a variety of students and faculty involved in higher education abroad. Students engage with one another in many high level discussions about the issues facing higher education throughout both courses. Together, they set the necessary framework for the Global Perspectives Program by giving students a broad view of higher education and the practices necessary to modernize higher education for the 21st century.

III.2. Global Perspectives Program: pre-trip meetings

In addition to completion of the PFP and GEDI courses, students are required to enroll in a three-credit Study Abroad course and attend regular meetings throughout the spring semester leading up to the GPP experience. During these meetings, students learn about and discuss topics relevant to understanding the educational structure in European institutions and the local culture of the regions visited during GPP. The meetings also allow students to develop individual research topics related to higher education that they plan to investigate during GPP.

For the 2016 Global Perspectives Program, students began by learning about the basic schedule for the program, hearing an overview of the universities that they will visit, and discussing the basic expectations for the program. At the second meeting, students presented their initial ideas for research topics and discussed these ideas with their peers. Students were also introduced to the structure of the educational system in Switzerland and how the structure of universities in Switzerland compares with educational systems in much of Europe. Key topics covered included the Bologna Accord, timelines and expectations for undergraduate and graduate degrees, mobility, terminology, and the Salzburg Principles. In subsequent meetings, students explored both the European Union’s modernization agenda and the European University Association’s priorities for education in greater detail. Several guest speakers were invited to these meetings. One guest speaker was a Swiss native who discussed Swiss culture and personal experiences with the Swiss educational system. Other guest speakers included GPP alumni shared advice and recommendations for how to have a successful, fulfilling, and transformative trip.

III.3. Global Perspectives Program: expectations and use of technology

To facilitate collaboration between students, several components are intentionally incorporated in the program. To promote ownership of the experience, a pair of students are

expected to lead a briefing and debriefing for each university visited. Students research at least one university before the trip, gathering information about the University's mission and specialties, fields of study offered, enrollment, educational values and priorities, and special or unique programs offered. Students then present this information and lead a discussion among their peers. Participants are also encouraged to start a journal to record observations, thoughts, and ideas and to thoughtfully make time for reflection prior to and during the GPP experience.

As part of the Global Perspectives Program, technology is incorporated as a fundamental way for students to connect and share experiences. Students are expected to initiate blogs where they can share their expectations and experiences before, during, and after the trip. Several blog prompts are provided to students, and students are encouraged to write additional blogs beyond those required. For the 2016 cohort, two blog posts were required. In the first blog post, students wrote about their expectations prior to their departure for the trip. In the second blog post, students were asked to reflect on the program after the conclusion of the trip. Students were also encouraged to tweet about the experience throughout the program and post updates, thoughts, and photographs. These tweets were shared using a specified hashtag and were then collected and compiled to create a more holistic view of the program using Storify [9].

Following the trip to Europe, the Global Perspectives Program culminates in a trip to the Embassy of Switzerland in Washington D.C., during which student groups including both students from Virginia Tech and partner European institutions give presentations on their major educational reform recommendations based on their observations abroad and collaborative efforts. In the 2016 cohort, students from Virginia Tech, Universität Basel, and Universität Zürich presented on three topics related to modernizing higher education. After the conclusion of the program, reports on student research topics are required a few weeks following the trip. These reports are compiled annually, along with contributions from some students and faculty from participating European institutions, to form the GPP Manual, which is published freely online [10].

IV. Global Perspectives Program 2016: path through Europe

Each year, the Global Perspectives Program varies slightly in the universities that are visited and the individuals with whom students meet. Due to the variation in program structure, this section of the paper describes the travels of the GPP 2016 cohort. The following section will be presented from the perspective of the students who participated in GPP 2016. During GPP 2016, students visited six universities in Switzerland, one university in France, and one university in Italy. We will include tweets from the trip throughout this section to provide a visual glimpse into the 2016 Global Perspectives Program.

IV.1. Sunday: initial trip meeting

The 2016 Global Perspectives Program began at the Hotel St. Josef in Zürich, Switzerland on a Sunday afternoon, where our group gathered to prepare for the upcoming university visits. For each university that we would visit, two students prepared and shared with the group a summary of that university. These briefings covered a number of topics including demographics, majors, research focuses, funding, and history, depending on what aspects the students leading the briefing chose to cover. On the first day in Zürich, we briefed our first two

universities: ETH-Zürich and University of Zürich. Following the briefings, we went to dinner as a group to facilitate the development of group relationships.



IV.2. Monday: Universität Zürich

On Monday morning, we visited Universität Zürich (UZH), one of 10 cantonal universities and the largest university in Switzerland. We were treated to a variety of presentations beginning with a talk by a faculty member whose expertise is the Swiss educational system. Although we had already discussed the Swiss educational system in our preparatory meetings, the talk helped to put everything in context and was an excellent way to start the trip. We then heard presentations about professional skill courses at UZH and spoke with current Ph.D. students. We heard from members of the mittelbau - the group including Ph.D. students, postdocs, and academic staff of the University that are not students, but are also not faculty. The mittelbau of UZH had formed a representative group, VAUZ, to represent their concerns with university leadership. Our group finished the visit to UZH with a tour of the main building of the university's campus. We stopped by different types of classrooms, saw the artwork and statues around the building, and visited a student commons area to get a feel for campus life.

IV.3. Monday: Eidgenössische Technische Hochschule (ETH)-Zürich

Next, our group traveled next door to ETH-Zürich, where we met with more faculty and staff. ETH is the main campus of one of two national universities and the top-ranked university in Switzerland. We had in-depth conversations with two different faculty members. The first was a Canadian-American expatriate in ecology who was living in Zürich. He discussed the structure of his lab with us, and told us about the great level of academic freedom and independence that each faculty member has. The second faculty member was a recent alumnus from Virginia Tech.

He was in the midst of the recently-introduced tenure process at ETH, which provided students with an interesting contrast to the US tenure process. The presentations provided us with a view of the scale of research and financial and academic freedom of researchers at ETH.



IV.4. Tuesday: Universität Basel

An early morning train ride took us to Basel on Tuesday, where we began by visiting a student residence near the university. This privately owned dormitory was primarily host to international students studying at Universität Basel (UniBasel). Throughout much of the trip, we discussed the fact that universities are disconnected from the student experience, so it was fascinating to see a privately owned residential facility that provides an experience similar to a US dormitory.

Following the dormitory visit, we visited the university itself. UniBasel has a version of the Global Perspectives Program which annually partners with our own program. This year's cohort from UniBasel included five Ph.D. students who would later join us for meetings at Riva San Vitale and eventually visit several US universities. We joined our colleagues at UniBasel for a presentation and conversation with Dr. Ed Constable, Vice Rector for Research. The conversation focused on "Taking Salzburg Forward," lessons learned and the future of the

Salzburg principles of doctoral education and led to a stimulating conversation about the purpose of Ph.D. education around the world.

IV.5. Tuesday: Academy of Art and Design

Tuesday afternoon took us to a different sort of institution; we visited the Academy of Art and Design in Basel. The Academy of Art and Design is a part of a larger university, Fachhochschule Nordwestschweiz (The University of Applied Sciences and Arts Northwestern Switzerland), which is one of eight universities of applied sciences in Switzerland. All universities of applied sciences are hands-on in nature, and the Academy of Art and Design is no exception. After several presentations from university leadership about the institution itself, we toured the campus. We saw several design labs and projects, ranging from immersive art exhibits to a graphic design space to a prototyping workshop, complete with CNC-routers and 3D printers. After campus tours, we met with current students and had informal conversations about their experiences and projects at the university.



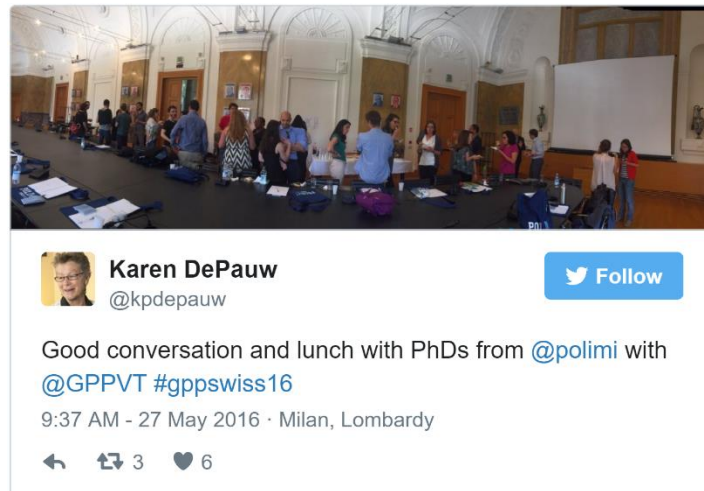
IV.6. Wednesday: Université de Strasbourg

Wednesday began with another train ride, this time up the Rhine River valley into Strasbourg, France. During this visit, we visited one of the oldest universities of our trip. University of Strasbourg, the second-largest university in France, was founded in 1538 and has both German and French roots, as the city has changed hands many times in the past 500 years. We were welcomed to the international graduate student dormitory on campus, and discussed the university with students before meeting with any faculty members. After a passionate lecture on the role of the university in society by Dr. Jeanne-Marie Tuffery-Andriea, we had a panel

discussion with current international Ph.D. students from around Europe studying at the university. These students provided perspectives on topics such as the Erasmus program, which is a European student exchange program, and graduate life in general. Finally, we were treated to a walking tour of the beautiful campus by several of the students. After an afternoon and dinner in the city, we took the train back to Basel.

IV.7. Friday: Politecnico di Milano

On Thursday, we traveled from Basel through the Alps by train to the Villa Maderni, a study abroad facility owned by Virginia Tech in Riva San Vitale, Switzerland, in the Italian-speaking state of Ticino on the Italian border. On Friday, we departed our lodging in Riva San Vitale and took a train ride into Italy to visit Politecnico di Milano (PoliMi) for the day. Much like many of our other visits, this visit included presentations from faculty and administration, a campus tour, and a reception with students. We learned about the university structure and role in society and the Polisocial program, which is designed to reinforce the culture of public engagement with the university. After the university visit, we took the opportunity to see the sights of Milan and traveled back to Riva San Vitale for the weekend.



IV.8. Monday: Scuola Universitaria Professionale della Svizzera Italiana (SUPSI)

After a weekend of cultural activities, we spent Monday visiting the last two universities of our trip. SUPSI is another university of applied sciences, primarily focused on preparing technology professionals at the undergraduate level. We heard presentations about the work of the university and visited several labs, where students gain practical research experience during their studies. All research happening at the university is either industry-sponsored or real-world motivated. SUPSI provided a nice contrast to the large, research-driven universities that we spent most of the trip visiting.



Chelsea Corkins
@Chelseacorkins

[Follow](#)

Virtual touch tables, micropollutants, ambient intelligence and control systems. [#SUPSI](#) applied sciences [#gppswiss16](#)

6:01 AM - 30 May 2016 · Ticino, Switzerland

[↩](#) [↻](#) [❤](#) 2



Karen DePauw
@kpdepauw

[Follow](#)

Learning about [#faces4heritage](#) from Prof Cantoni
[@USInews](#) w/ [@GPPVT](#) [#gppswiss16](#) [#unite4heritage](#)
[@Martin_Dahinden](#)

9:22 AM - 30 May 2016 · Lugano, Switzerland

[↩](#) [↻](#) 6 [❤](#) 9

IV.9. Monday: Università della Svizzera Italiana (“USI”)

The final university stop was the cantonal university for the canton of Ticino, Università della Svizzera Italiana (USI). The visit to this university was brief, but we heard presentations about the university and a talk by Professor Lorenzo Cantoni, who discussed joint USI and UNESCO social media initiatives to preserve cultural heritage, before we toured the campus and met with students.



IV.10. Tuesday - Thursday: Riva San Vitale

From Tuesday through Thursday of the second week, our colleagues from the University of Basel and one student from the University of Zürich joined us in Riva San Vitale to discuss issues related to higher education. Discussions were centered on the overall theme of “the Modernization of Higher Education.” Students formed three groups, and each group discussed a different aspect of the modernization agenda. One group of students discussed the relevance of teaching and learning, one group discussed higher education institutes as strong regional innovators, and a third group discussed opportunities to mutually reinforce education and research. These three groups presented their ideas to the remaining groups and created presentations providing an overview of their discussions. These presentations would then be presented during a visit to the Swiss Embassy in Washington DC after the conclusion of the trip.

IV.11. Embassy of Switzerland in Washington, D.C.

Following the conclusion of the trip to Europe, we met with colleagues from Universität of Zurich and Universität Basel at the Embassy of Switzerland in Washington, D.C. The visit opened with remarks from Dean DePauw, which was followed by a keynote address from Dr. Max Vögler from the German Research Foundation (GRF). The embassy visit provided an opportunity for us to further reflect on what we had learned and discuss ideas related to higher education with an audience consisting of individuals from other embassies, higher education institutions, and funding agencies. We discussed ideas related to the overall theme for the 2016 Global Perspectives Program: the Modernization of Higher Education. Each group that met in

Riva San Vitale gave a presentation on the topic they discussed at the Villa: the relevance of teaching and learning, higher education institutes as strong regional innovators, or mutually reinforcing education and research. Following our presentations, we were invited to the Ambassador's residence for a reception and networking with the audience.

V. Student perspectives

Prior to the GPP trip, students were asked to identify research questions that they wanted to explore during the trip. This enabled the students to guide their discussions during the trip, gain more in-depth information about a specific topic, and then share that information with the rest of the group and with those following the program, such as friends, family, and individuals at their home university. These reflections were captured in blog posts, tweets, and a final report. In the following section, participant initials are used to identify the source of each quote, for example (GN) represents Gary Nave. Each participant quoted is also an author of this paper.

V.1. Student perspectives: blog posts

As part of program, students were asked to blog about their experience. A minimum of two blog posts was required, one blog post before the trip began describing expectations for the trip and one blog post at the conclusion of the trip reflecting on the experience.

In the first blog post, students described their expectations, what they had learned in the required courses and pre-trip meetings, and what they hoped to learn. In their blogs, several students articulated specific questions that they were seeking to learn more about during the course of the trip. Students were interested in exploring questions related to higher education broadly as well as questions regarding specific issues and concerns within higher education. For example, one student identified several questions related to diversity in higher education that they hoped to explore during GPP, including: "How has the Swiss Federal Equal Opportunity at Universities Program changed the diversity landscape of higher education at institutions?" (MW). A second student stated that he wanted to "focus on the role of a faculty member as a mentor to students" and "to learn the differences in the way that faculty view their jobs [in] different countries" (GN). Stemming from her own research, another student described how she wanted "to hear how ethics education might differ between the universities, each with such distinct and often highly specialized fields of study" (EG).

These questions posed by students were shaped by the prerequisite courses, and the questions evolved during the meetings that took place prior to the trip. One student described her shift in research questions, which focused on issues of diversity, in the following way:

Initially, I wanted to learn more about how the Swiss go about increasing diversity in higher education. However, diversity concepts are very different in America, where many issues are rooted in race discrimination. However, race is not quite as prominent in Switzerland; the main foci of discrimination at Swiss institutions are gender and internationals. (MW)

In addition to learning about issues related to higher education, students described a desire to learn more about the culture, people, and places that they would be visiting. One engineering student described a desire to "talk to people, to hear their stories, and learn about other people and other places [and] learn about another corner of the world" (AH). Similarly,

another student stated that he “was curious to know more about different communities, cultures, interactions, and societies” (MS).

While each student began the trip with specific questions related to their own interests, one commonality amongst all the blog posts was that all students described a sense of excitement about the upcoming trip and visits to the universities. Many students did not know what exactly to expect, but they knew that they were “excited to be there.” (GN)

After the conclusion of the trip, students were asked to write an additional blog post and reflect on their experience abroad. In these blog posts, students reflected on the meetings that they had, the people that they talked to, and the places that they visited. In addition to talking about what they learned through these interactions, students described their observations during the trip. Some observations were related to students’ own research interests, and some observations related to the people and the culture. A Ph.D. candidate in Environmental Engineering observed environmental stewardship in the Swiss culture. In her blog post, she describe observing that the Swiss used “low flow plumbing fixtures,” had “readily available (and strongly encouraged) recycling,” and incorporated “permeable pavement” (EG). These observations that she made during the course of the trip were shaped and influenced by her doctoral studies. Students also described observing the culture and the people. One student described how one thing that he noticed during the trip was related to “how people deal with time, and how this affects their lifestyle and how they enjoy life in general” (MS). He described how “seeing people actually enjoying their time together, and spending long [periods of] time just for such social activities [such as chatting with colleagues and spending up to 2 hours at lunch] provided more in depth understanding of this culture” (MS). Similarly, another student described learning about topics such as work-life balance, teaching as a graduate student, the transition from school to work, and politics by listening to the stories of individuals she talked to. She described how she “learned the most about universities and life in general by asking a few questions and then just listening to people’s stories” (AH).

These reflections highlight that students learned by not only engaging in discussions and presentations at universities, but by being immersed in a culture, listening to those around them, and observing new surroundings.

V.2. Student perspectives: final reports

In addition to writing blogs and tweeting about the experience, student were asked to write a report at the conclusion of the program addressing the research questions that each student identified prior to the trip.

The research questions that students explored varied from student to student, and therefore the reports varied in the topics that students addressed. Emily Garner explored how “universities and their faculty, staff and students interact with the communities that they serve” and how “universities train students to be socially responsible and ethical researchers and professionals” [11]. These questions were influenced by her research and experiences as a Ph.D. candidate in Environmental Engineering. Throughout her report, she explored how each institution visited during the GPP trip viewed the idea of serving the local community.

Mohammed Seyam, who has since completed a Ph.D. in computer science, explored “how graduate students are engaged with university governance systems, and what it is like to be

an international graduate student in European universities” [11]. Seyam described how he came back from the Global Perspectives Program “with tons of notes and observations that would definitely help [him] both on the personal and the professional levels” [11]. Throughout the trip, he learned that:

There’s no ‘ideal system’ for education. Rather, there are ‘other’ systems which we can always learn from to be better. It’s important to notice that learning doesn’t necessarily mean that we should ‘follow’ what the others are doing, but it also means to learn what we ‘shouldn’t’ do after watching the others doing it! [11]

Before, during, and after the Global Perspectives program of the Virginia Tech Graduate School, students explored various aspects of higher education both at their home institution and at institutions abroad. This provided students with additional perspectives on higher education and gave students experience with universities that had a different focus and a different mission than the institution that they attended for their own education. These experiences helped the students to develop a global perspective and expand their experiences, which are important skills for graduate students who will be conducting research, teaching, and entering industries that have a global impact.

VI. Conclusions and recommendations for future travelers

The Global Perspectives Program of the Virginia Tech is an innovative and culturally immersive study abroad program, designed to educate graduate students in global competency and facilitate their transitions from students to world leaders in their field in the 21st century. The GPP program gives graduate students a unique networking and learning opportunity at higher education institutions abroad that would otherwise be prohibitive because of cost or distance. After 11 years of the Global Perspectives Program, over 100 graduate students from Virginia Tech have gotten the opportunity to visit and learn from institutions of higher education in Europe and engage in rich conversations about the purpose and future of the university.

For other universities interested in incorporating a study abroad program like GPP into their graduate education initiatives, we can make several recommendations. The building of relationships with other institutions both domestically and internationally is the foundation of GPP, so we recommend starting by examining existing networks and resources. A GPP experience in Ecuador was started by visiting the home university of one of Virginia Tech’s own graduate students. We also recommend using technology to enable collaboration. Technological tools, in particular blogging and Twitter have allowed for rapid and global sharing of ideas throughout the program. These allow collaboration to begin before travelling and to continue after the trip. It is also essential in global education to recognize the needs of participants. GPP was founded on the belief that global competency is incredibly important, but that graduate students cannot afford the time spent for such a trip over a whole semester. Finally, we encourage people to go. There is no substitute for physically walking around a new place, hearing conversations in another language, and experiencing life somewhere else in the world.

References

1. L. B. Denney, M. Sanchez-Pena, and J. B. Main, "Examining how international experiences promote global competency among engineering graduate students," 2015 IEEE Frontiers in Education Conference (FIE), 2015.
2. A. E. Austin, "Preparing the Next Generation of Faculty: Graduate School as Socialization to the Academic Career," *The Journal of Higher Education*, vol. 73, no. 1, pp. 94–122, 2002.
3. B. A. Fischer and M. J. Zigmond, "Survival Skills for Graduate School and Beyond," *New Directions for Higher Education*, vol. 1998, no. 101, pp. 29–40, 1998.
4. A. E. Austin, "Preparing the Next Generation of Faculty: Graduate School as Socialization to the Academic Career," *The Journal of Higher Education*, vol. 73, no. 1, pp. 94–122, 2002.
5. A. C. Rumore, C. Byker, K. Dirk, L. Gay, E. Hodges, S. Kale, J. Lile, J. Moore, A. Nakamura, C. R. Smith, M. Stewart, A. Tawfik, S. Triantafyllidou, E. Williams, D. Kniola, S. Fowler, K. DePauw, "Global Perspective: Rethinking the Ph.D.," *Conference on Higher Education Pedagogy*, vol. 4, 2012.
6. "Graduate Studies GO History," Graduate Studies. [Online]. Available: https://graduate.tcu.edu/career-development/the-go-institute/go_history/. [Accessed: 12-Feb-2017].
7. "Graduate school's Global Perspectives Program expands to Ecuador," *News | Virginia Tech*, 18-Jan-2017. [Online]. Available: <https://vtnews.vt.edu/articles/2017/01/global-perspectives-scholars-ecuador.html>. [Accessed: 12-Feb-2017].
8. M. Stewart, "TripVis: Geographically-Situated Reflection, Sharing, and Presentation for Study Abroad Experiences," *Conference on Higher Education Pedagogy*, vol. 9, 2017.
9. <https://storify.com/cathgrimes/global-perspectives-program-summer-2016>.
10. "Global Perspectives: Comparative views of academic leadership, governance, research and teaching in Swiss and US Higher Education," 2010. Available: <https://futprof.global/download/2200/>.
11. "GPP Switzerland 2016 Manual," 2017. Available: <http://futureprof.global/work/gpp-switzerland-2016-manual/>.