To have a conference addressing higher education in India is one thing. But to grow universally from these experiences, both at home and abroad, is another.

October 10-11 marked the U.S.-India Higher Education Research Conference which took place at the Pennsylvania State University. Speakers, educators, researchers and participants from across the globe flocked to the university’s University Park campus for an integrated discussion that promised further collaboration and developments.

“We’re coming together, interacting with one another, to leverage opportunity, overcome challenges and transform higher education in India,” said David Finegold, Senior Vice President for Lifelong Learning and Strategic Growth Initiatives at Rutgers State University of New Jersey.

Finegold spoke the first afternoon of the conference about overcoming these challenges that the Indian higher education system is facing.

The kind of U.S.-India collaboration allowed at a university like Penn State explains itself, said the school’s Vice Provost Michael Adewami, considering more than 700 students and approximately 50 full, tenured professors of Indian origin are studying and working at Penn State.

“I think this conference will help further the ties that already exist between researchers and administrators and counterparts of education,” he said. “We have more than 500 existing collaborative research projects already and we are creating a network of scholars and policy-makers.”

Former Penn State President Graham Spanier said that this conference, the first of its kind at Penn State, marks an effort to see if there is not something more formalized and organized from which the U.S.-India collaborative process might move forward.

“I think this is an opportunity for a lot of people to get acquainted and to open some lines of communication,” he said. “It’s exploratory in many ways.”

The already-existing international exchange efforts at Penn State include Professor Lindsay Beverly’s course in higher education and international policy studies within the College of Education. The first American to become a Senior Fulbright Specialist in South Korea (2002) and Zimbabwe (2003), Beverly led peace and conflict resolution initiatives, and her past invitations to speak abroad at institutions of higher learning are numerous.

“I spent time in India working in higher education,” she said. “We looked at international higher education systems all over the world on a comparative and an international level.”

Beverly said that the course is concentrated on “talking in real time with real people,” meaning connecting via live video conferences. So far, the class has “been” as far as the University of the
West Indies in Jamaica and the University of London. Beverly added that India is on the course’s “to do” list.

“I think that through this conference we’re going to initiate and strengthen some formal partnerships and enhance the quality of education through those partnerships with our Indian colleagues,” she said, adding that both parties will benefit. “The BRIC – Brazil, Russia, India and China – countries are still expanding economically and will continue to move forward and have a greater presence in the world scene.”

Attendee of the conference and former PhD student in the Penn State Economics Department, Class of 2009, Manaswini Bhalla traveled from her job as a professor at the Indian Institution of Management in Bangalore, south India.

“Getting national exposure is precious,” she said. “Somewhere, somehow something will result.”

Speaking on transforming higher education in India during the conference’s evening session, Central University of Himachal Pradesh Vice Chancellor Furqan Qamar said that there is no short-term solution to some of the problems in Indian higher education, but he is hoping for a “shift.”

“We want to attract quality faculty in the system, but there’s a shortage of people we want and a large number of people aspiring to be faculty,” he said. “There may be 960 eligible to become faculty, but within the system, it’s a real challenge to reject them sometimes, even if they are not fit for the education system.”

Vice Chancellor of Central University of Tamil Nadu, B.P. Sanjay, said that the challenge India faces is to adapt affirmative action more broadly and deliberatively, particularly to historically marginalized groups, but without affecting the quality of education.

“The challenge is to keep the legacy for quality,” he said. “Students come from different economic backgrounds, but we cannot deprive them.”

With India taking up about one-sixth of the world’s population, Sanjay added that at the start of this change, people will “be a bit wary,” but solutions will come, unting the 5 million India natives now living here with the 70,000 Americans now working in India.

“Both the U.S. and India have vibrant democracies and enormous diversity amidst similar political systems,” he said. “Put their human resources together and they can become a model for the rest of the world. This is a marriage made in heaven, and that should be exploited.”

Penn State Material Sciences Department Professor Dinesh Agrawal said that Penn State increasingly sees itself as an international university, always forming joint research projects and allowing the movement of faculty.
While in the U.S., there are more than 4,000 institutions of higher education, in India there are “a little over 400 universities of higher education for a country four times the size of the U.S.,” Agrawal said.

“For those 1.2 billion people, education has to be a big priority,” he said.

Of the 5,000 students at any given time studying abroad at Penn State from other countries, international students from India are the third highest ethnic group of this population, with China coming in second, Agrawal said.

As the Director of the Microwave Processing and Engineering Center, Agrawal said Penn State is extending its research in a cooperative way through his joint U.S. and India team research center exchange program, which gives students from both countries the opportunity to travel to the other country to train for their thesis by doing research and to publish information in several MRI journals.

Their joint research concentrates primarily on microwave processing of materials, such as ceramics, metals and other composites. Their lab work and research has been so promising, in fact, that he estimates that in about five years the group will have produced a product that can be commercialized to make tons of steel.

“It’s better, cheaper and environmentally safer because there’s lower energy consumption,” Agrawal said. “It cuts down carbon dioxide production for steelmaking by 50 percent.”

Penn State professor of sports law and Director of the Penn State Sports Law Institute, Stephen Ross, said that the history of sports in India, particularly in cricket, which had no prestige prior to 2008, can teach us more about the global market and cultural exchange.

“The only cricket that people would seriously pay money to see was international cricket,” he said.

That all changed when, in April 2008, senior officials launched a professional cricket league – the Indian Premier League, one of the world’s biggest sports and worth more than $300 million in the U.S., Ross said. Soon they hired IMG to help start up the first season six months later.

“I had been in touch with IMG about this, so I was hired as a consultant by IMG to help them set up the basic design of the Indian Premier League,” he said. “Now it’s an incredibly successful cricket league that plays in 10 cities across Calcutta and Punjab.”

Shortly after Ross became involved with IPO, he completed a book called Fans of the World, which argues that American sports leagues would be better organized if the people who ran the competition were independent of the club owners and corporate board of directors, he said.

“IPO is a good illustration of that because it’s run by an independent board of directors whose best interest is in the league in India,” Ross said. “In India, if you make a business mistake,
there’s a salary cap and the club owners have to spend more out of their pocket when they make lousy decisions.”

Thus, this might be a good business model exchange for the U.S. to consider. But the opposite is not always true, he said.
“The Indian economy is a unique economy from a human situation only rivaled by China, but still maintains great control and has all these capitalistic opportunities,” Ross said. “If you tried to apply European or American business practices over there, they’d plop. There are so many more people and such poverty.”

Thus, the opportunities for cultural exchange are numerous.

“As the Indian market continues to grow and develop, I see a huge opportunity for sports in India and a huge potential for exchanges in law and business and sports management as India becomes more capitalist,” Ross said.

Professor in Penn State’s Math Department, George Andrews, has visited India five times in his life within the last three decades for research all on the same subject: Indian education.

“I wanted to look into private education among the poor and so asked if I could visit some of these schools because of my interest in seeing how it was possible to have the effective and significant numbers in Indian education,” Andrews said.

So a year ago, this summer, he attended the International Congress of Mathematicians in Hyderabad in central India, where he found the time to do just that.

“While the government money available for countries like India is sufficiently minimal, the poor are motivated and anxious that their children do better,” he said. “There’s also minimal infrastructure, but they have the commitment to the intellectual enterprise.”

In the U.S., most private schools are religion-based, he said, whether infused with Protestant or Catholic doctrine. Whereas in India, there are a number of religious private schools, but also a number of secular private schools.

Another key difference Andrews noticed during his research in Hyderabad was that throughout sixth grade in India, most of what is learned is memory-based, which is “not terribly popular in the U.S.”

“Indians are dominating a lot of the world’s emerging economy,” he said. “The schools there might not have the flashy and appealing aspects of American schools, which might have amazing computer equipment or a swimming pool, but the students there take education very seriously.”

As President of the American Mathematical Society, Andrews said he attended the International Conference of Mathematics in 2010, hosted in India.
“The important things I followed detailed how education works best,” he said. “The existence of private schools is a very bottom-up enterprise. It’s the people trying to solve their problems. In the United States, I’m afraid, many of our efforts to solve our education problems are top-down.”

Andrews said that he was “shocked” by how “bottom-up” the education system in India is, so much that at times government officials denied the existence of the private schools in the slums. “Obviously what is happening in India is very exciting because it’s population-wise a huge country,” Andrews said. “Everything there is on a bigger scale than here: The middle class is larger by far, but the poor are massive. I do think there are lots of things to learn from Indian education.”

In response to America’s “top-downness,” Andrews said he is trying to encourage a program with its origin in the Vermont Mathematics Initiative, which is designed to increase the content knowledge of elementary school teachers.

“We’re trying to identify a variety of programs that are bottom-up programs that might be useful in drawing attention to them from the entire mathematic community,” he said. “There are several around New Jersey, Nebraska…. We want to draw attention to some of the most successful so that they can be emulated.”