
COMMUNITY COLLEGE ADMINISTRATOR PROGRAM WITH INDIA

ASSESSMENT TRIP REPORT



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COLLEGE



THE COMMUNITY COLLEGE ADMINISTRATOR PROGRAM

Assessment Trip Report March 9-18, 2015

The Community College Administrator Program is a U.S. State Department initiative intended to enhance international understanding of U.S. community colleges and U.S. community college systems among administrators of post-secondary vocational and technical institutions as well as officials with higher education planning responsibilities in selected countries currently in the process of developing their own community college systems. The program is designed to introduce participants to key elements of community college leadership, to provide direct exposure to the day-to-day administrative responsibilities and challenges of U.S. community colleges, and to investigate specific community college academic and vocational programs relevant to the needs of participants' home institutions. The programs' goals are to enable participants to

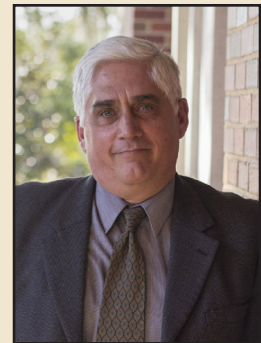
- Demonstrate enhanced ability to effectively address governance and policy questions integral to the establishment of community college programs relevant to their home country's context;
- Contribute to the present and future demands for policy formulation, continuous planning, program management decision making and day-to-day administration of community colleges;
- Explore aspects of the U.S. higher education system and provide a more comprehensive understanding of the U.S. community college administration;
- Articulate the unique and important opportunities created through merging academic, business and management skills through the community college system; and
- Encourage on-going collaboration between participants and U.S. counterparts involved in community college administration.

In 2013 the Learning Systems Institute at Florida State University was awarded a cooperative agreement by the U.S. Department of State to implement a Community College Administrator Program with Indonesia. This first CCAP with Indonesia was implemented in 2014 by LSI in cooperation with Valencia College, the program's principal community college partner, and five other community college partners in Florida: Tallahassee Community College, Santa

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Fe College, Indian River State College, Seminole State College and St. Petersburg College. In 2014 the Department of State extended its cooperative agreement with the Learning Systems Institute to support a second CCAP program with Indonesia, which was implemented in 2015 by LSI and Santa Fe College with supporting visits to Chipola College, Tallahassee Community College, Indian River State College, Seminole State College and St. Petersburg College. Later in 2014 the Department of State awarded a second cooperative agreement to LSI to partner again with Santa Fe College in implementing CCAP programs for participants from India, Ukraine, and a multi-country delegation from Latin America.

COMMUNITY COLLEGE ADMINISTRATOR PROGRAM WITH INDIA ASSESSMENT TRIP

From March 9-18, 2015, Dr. Jeffrey Ayala Milligan, Director of FSU's Learning Systems Institute, and Dr. Vilma Fuentes, Assistant Vice President for Academic Affairs at Santa Fe College, traveled to India to develop a better understanding of India's community college initiative as well as the Department of State's support for that initiative and other educational development efforts in India. Dr. Milligan and Dr. Fuentes met at the American Center with Katherine Caro, Cultural Attachè for Education and Exchanges, Shibi Jose, Cultural Affairs Specialist (Education), David Mees, Cultural Counselor, U.S. Embassy and Adam Grotzky, Executive Director of the U.S.-India Education Foundation to discuss the

application process for the CCAP with India and make plans for site visits to representative community college programs. Ms. Caro and Ms. Jose also arranged a meeting with Prof. Dr. Avinash Pant, at the time Acting Chairman of the All India Council for Technical Education, to discuss AICTE's role in the community college initiative in India.

After meeting with relevant U.S. and Indian officials in New Delhi, Dr. Milligan and Dr. Fuentes conducted site visits to learn about community college development at four polytechnic colleges: Government Polytechnic Aurangabad (Maharashtra), Government Polytechnic Panaji (Goa), Maharaja's Technological Institute Thrissur (Kerala), and Ambedkar Polytechnic in New Delhi. Findings from these site visits will be discussed later in this report.

INDIA'S COMMUNITY COLLEGE INITIATIVE

India's community college initiative is driven by a striking demographic challenge/opportunity and a growing awareness that existing academic institutions might not be well-suited to meet it. Over 50% of India's current population is under the age of 30. The University Grants Commission reports that, by 2025, India will account for approximately 25% of the world's total workforce. This huge youth population represents an enormous challenge to the Indian government to provide the educational and economic opportunities necessary to ensure a brighter future for India's



Dr. Jeffrey Ayala Milligan, director of Florida State University's Learning Systems Institute, and Dr. Vilma E. Fuentes, assistant vice president for academic affairs at Santa Fe College, meet with students and administrators at the Government Polytechnic Aurangabad.

Dr. Fuentes receives a traditional welcome at the Government Polytechnic Aurangabad.



youth. However, if India is able to meet this challenge and provide this population with marketable knowledge and skills then this demographic challenge becomes an economic boon. The key is, according to the UGC, “an education system which is of high quality, affordable, flexible and relevant to the individuals as well as to the society as a whole.”

Existing educational structures, however, may not be up to the task. Again, according to the UGC, the “majority of contemporary institutions of higher learning remain almost disconnected from the requirements of the workplace” and are “rigid in terms of duration of courses, timings for teaching-learning, place of study and choice of subjects.” The skill oriented courses that are offered have low credibility with employers, which only enhances the perception of many students and parents that vocationally-oriented higher education is a low-status educational option attractive only to those who have no other options. The result is a supply-demand mismatch wherein traditional, higher-status educational programs produce graduates who lack the skills, and perhaps the dispositions, to do the kinds of jobs the economy needs done and existing vocational programs that fail to provide the high level skills required of a modern economy.

There has been interest in the community college model as a response to these demographic and economic challenges since at least the mid-1990’s, when a Fulbright scholar from a U.S. community college in Iowa and a Catholic educational leader, Xavier Alphonse, advocated the community college as a mechanism for addressing the educational, social and economic plight of the poor, minorities, lower castes and other marginalized communities. Between 1995 and 2009 213 of these institutions were established in 19 states and had educated more than 50,000 students. Though supposedly inspired by the comprehensive U.S. community college model

(Alphonse and Valeau, 2009), these “NGO model” community colleges (Jillian Gross, personal communication) are in fact small, local endeavors focused on the uplift of the poor and marginalized by imparting basic education, coaching in “soft” skills and some training for a marketable trade.

Beginning in, roughly, 2009 the community college idea in India received a major boost when Indira Gandhi National Open University, one of the largest educational institutions in the world, began to establish community colleges throughout the country. Over the next three to four years IGNOU established 620 new community colleges serving some 80,000 students. By 2013, however, IGNOU suspended the establishment of new community colleges and later eliminated the colleges it had established amidst controversy over their supervision, quality and whether they had fulfilled promises made to students (Suneya 2013, Sharma 2015).

These first two phases of community college development in India appear to have introduced and popularized the idea of the community college but, perhaps due to lack of resources or a centralized coordination of efforts, led to the proliferation of small institutions of varying quality and limited educational and economic impact. Beginning in 2012 the government of India introduced a more coherent approach to the development of community colleges in its 12th Five Year Plan. In that plan the University Grants Council and the All India Commission on Technical Education were each tasked with piloting 100 community colleges to help refine the model before scaling up to try to meet the needs of the Indian economy for skilled labor. The resulting community college initiative is intended

1. To make higher education relevant to the learner and the community;

2. To integrate relevant skills into the higher education system;
3. To provide skill-based education to students currently pursuing higher education but more interested in entering the workforce at the earliest opportunity;
4. To provide employable and certifiable skills with necessary general education to senior secondary school graduate not interested in enrolling in the existing higher education system;
5. To provide for the upgrading and certification of traditional/acquired skills of learners irrespective of their age;
6. To provide opportunities for community-based life-long learning by offering courses of general interest to the community for personal development and interest;
7. To provide opportunities to move to higher education in the future; and
8. To offer bridge courses to certificate holders of general/vocational education so as to bring them up to par with National Skills Qualification Framework levels.

Current policy envisions the development of a strand of higher education that offers traditional academic coursework while at the same time providing a skills-based, vocationally-oriented program of studies designed to meet the workforce needs of a modern Indian economy. This strand of vocational higher education is intended to have multiple exit points after defined periods of study. Students will be able to earn a Certificate after as little as three months of study, an Advanced Certificate after one semester, a Diploma after one year of study, an Advanced Diploma after two years of study and a Bachelors of Vocational Education (BVoc) after three years of study.

The University Grants Commission has also introduced plans for a choice-based credit system. At present, the diversity of India's higher education system results in multiple and often inconsistent approaches toward examination, evaluation, and grading of learning objectives and student performance. According to the UGC, "this creates difficulty for the academia and the employers to understand infer the performance of students graduating from different universities and colleges based on grades." The choice-based credit system is intended to standardize the length (15-18 weeks) and scheduling (July-December, January –June) of semesters, the amount of instructional time (1 hr./week or 2 hrs./week of practical/field work) per credit hour, and the grading scale. Degree and diploma programs will be defined in terms of the number of credit hours required for completion. A primary objective of these changes is to enhance both horizontal and vertical mobility of students through the system.

It is important to note that the Indian community college initiative does not intend to develop new, stand-alone institutions. Rather, community colleges and the B.Voc. are new programs that will be

hosted and implemented by existing colleges and universities in existing facilities. Colleges or universities interested in developing community college programs may apply to do so. Under UGC guidelines they are required to have their own governing structures, which include a Board of Management to be comprised of representatives of the affiliating university, relevant industries, local bodies, state government and a nominee of the UGC and a Board of Studies, which is chaired by the principal of the community college and the head of one of the local partner industries and includes members from the affiliated college, partner associations and professional guilds. The Board of Studies will determine programs to be offered by the community college.

Community college curricula are to be designed in accordance with the National Skills Qualification Framework in close consultation with local industry. While the curriculum is intended to equip students with marketable skills, the colleges are also expected to "preserve and promote the cultural heritage of the locality, be it art, craft, handicraft, music, architecture, or any such thing, through appropriately designed curriculum with proper assurance of employment, including self-employment and entrepreneurship development."

The community colleges are intended to serve students who are not being accommodated in the existing university and polytechnic college systems. While the "NGO" community college model envisioned admission for school drop outs and other marginalized groups, the community colleges being developed under the auspices of the UGC and the AICTE require completion of a course of secondary-level study equivalent to that required for admission to the host university or polytechnic college. Community colleges affiliated with a university require completion of 12 years of pre-collegiate study: completion of 10th grade plus two years of senior high school. Students seeking admission to community colleges affiliated with polytechnic colleges are required to complete only grade 10; however, in practice some students have also completed the two years of additional study. These students may have completed the two years of additional study in hopes of attending university but later opted for the polytechnic college or the community college program affiliated with the polytechnic college when they did not gain admission to university or polytechnic.

U.S.-INDIA COOPERATION ON HIGHER EDUCATION AND COMMUNITY COLLEGES

The U.S. has long-standing and extensive ties with Indian higher education. Indian students are the second largest group of foreign students studying at U.S. universities, and more Americans are choosing to study in India. Current collaborative programs include

- USAID support to establish a new Indian Institute of

Technology

- USAID funding of the India Support for Teacher Education Project
- The 21st Century Knowledge Initiative
- The Fulbright-Nehru Program
- Passport to India
- U.S.-India Higher Education Dialogue

While U.S.-India collaboration in the education sector has tended to emphasize university-level education, the Indian government's current emphasis on skills development has led to a growing interest in U.S. community colleges. According to a press release from the U.S. embassy its Higher Education Dialogue and its community college collaboration will facilitate partnerships between U.S. community colleges and Indian institutions to "enhance economic opportunity in India through adoption of the community college education model and best practices in skills development." For instance, in 2014 the Fulbright-Nehru Education Seminar brought a group of 13 Indian educators to the U.S. for two weeks to visit community colleges in Virginia, Maryland, New York, and Florida. Also in 2014 the American Association of Community Colleges (AACC) and the All India Commission on Technical Education (AICTE) signed a Memorandum of Understanding to support the Indian government's skills development initiative. A five-person delegation from the AACC visited India for one week in November 2014 to learn more about the Indian government's skills development initiative. Their itinerary included a visit to one polytechnic college in Kolkata.

Dr. Jeffrey Milligan and Dr. Vilma Fuentes' trip to India from

March 9-18, 2015, built upon the momentum generated by the U.S.-India Cooperation on Higher Education in the preceding six months. The purpose of the trip was to obtain information about the new community colleges that had been piloted throughout the country and use this knowledge to create a six week Community College Administrator Program (CCAP) for India that took into account the needs, challenges, and successes of the Indian community college system. Senior administrators at AICTE arranged for Dr. Milligan and Dr. Fuentes to visit select four polytechnics that were piloting community colleges. The following summarizes what they learned during their visits to these institutions.

GOVERNMENT POLYTECHNIC AURANGABAD

The Government Polytechnic Aurangabad was established in 1955 and is both the oldest and premier polytechnic in the state of Maharashtra. It offers eight full time diploma programs. Some of these can be completed in three years of full-time enrollment (e.g., electronics and electrical engineering programs) while others require five years of full-time enrollment (e.g., mechanical and civil engineering programs). Part-time enrollment is also available and enables students to attend night school while working. The Government Polytechnic Aurangabad has grown from serving 60 full-time students in 1955 to serving 2144 students today. During the 2014-2015 academic year, 660 students were enrolled in full-time degree programs and 60 additional students were enrolled in these part time. The remaining students were enrolled in certificate or other short-term training programs. The Government Polytechnic Aurangabad is the only autonomous polytechnic in Maharashtra, a distinction it received in 1994. This means the institution determines and implements its curriculum, administers exams, and



Dr. Milligan and Dr. Fuentes visit with administrators of the Government Polytechnic Aurangabad and local employers who are serving as Skills Knowledge Providers for new community college programs.

makes administrative decisions while receiving all of its funding from the central government. The Government Polytechnic Aurangabad currently provides some services not widely available in other institutions of its kind: it maintains an electronic and language library, offers faculty and staff development programs, and sponsors social and cultural events. The Government Polytechnic Aurangabad is considered a model polytechnic in India. It won the “Best Polytechnic Award” in 1996 and the “Best Polytechnic Overall Performance Award” in 2006 and 2010.

Despite this success, graduates from this institution are struggling to find employment. Interestingly, this is occurring at a time when major industries in Aurangabad are complaining of a labor shortage. All of this has led some graduates to question the value of their education and complain that they have not been taught marketable skills. In addition, potential students have chosen not to pursue a degree at this polytechnic given the lack of job prospects after graduation. Instead some have chosen to attend one of the more than 250 private higher education institutions in the state while others have decided not to attend college. The central problem with this and other polytechnics in India is that they are not imparting education and skills required by industry. In other words, there is a “skills gap” between education and jobs. There is also a general recognition that there are people in the community who have high skills that they have gained through on-the-job training but lack a certificate or diploma to credential them. Such individuals need a degree for a job promotion.

Polytechnics have adopted two approaches to addressing the shortage of skilled workers in their service districts. The first of these

approaches is to provide six month to two year advanced training programs. The Government Polytechnic Aurangabad has partnered with Yamaha and Mercedes Benz, two major employers in the city, to create short-term training programs to prepare students to work in their factories, repair shops, and showrooms. These industry partners provide the vehicles and training materials for free to teach students how to build and repair them. Graduates from these programs are virtually guaranteed a job upon graduation. However, these short-term programs are not funded by the central government and are significantly more expensive than the degree programs offered by the polytechnic. As a result, they are not accessible to many potential students in the area. Administrators have learned from the success of these short-term advanced training programs the types of practical, hands-on instruction that employers desire and have developed a second model for producing a skilled workforce: the community college.

The “community college scheme” was started in 2013 by the Government Polytechnic Aurangabad in order to address the existing skills gap among polytechnic graduates, meet local workforce needs, and provide affordable access to higher education to local residents. Four degree programs are offered as part of the community college experiment:

- Healthcare and Paramedics
- Automobile: electrical and ETX
- Construction: building technology
- Fashion design

A total of 100 students are enrolled in these programs this academic year, including 63 recently admitted students. The community college programs also just had their first graduating class in early

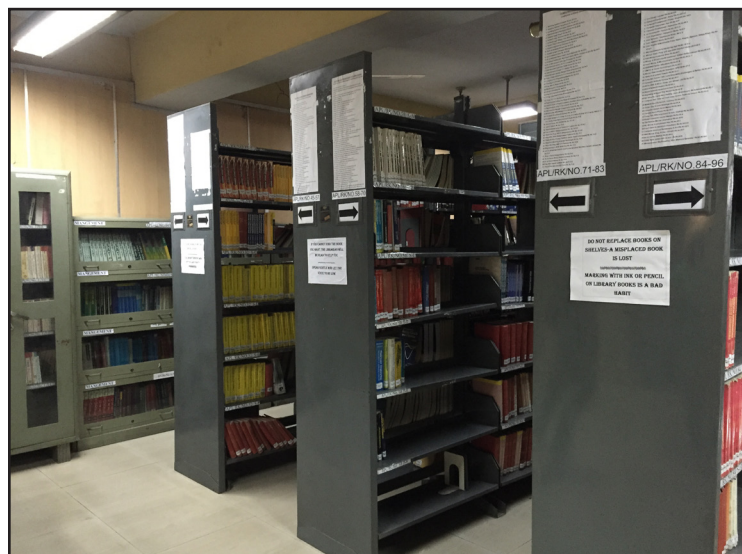


At the Government Polytechnic Aurangabad, which focuses on practical vocational skills, students can take advanced training programs supported by Mercedes-Benz and Yamaha that rely on strong partnerships with local employers. The success of such programs has encouraged colleges to explore the community-college model to provide hands-on instruction with Skills Knowledge Providers.

2015. Most graduates have been successful at finding employment.

There are several significant differences between the academic programs offered in the community college and those found in the standard diploma programs within the polytechnics. First, the source of the two curricula is quite different. The community college programs were developed by AICTE while those offered in autonomous institutions like the Government Polytechnic Aurangabad were developed by college faculty and administrators. Although polytechnic administrators were not told which specific programs to implement, they were required to select four of the dozens of academic programs that were developed by AICTE staff in consultation with national-level employer workgroups. As a

result, faculty and college administrators have little say about what is taught and how the content is delivered. The AICTE developed the curriculum, determined which topics should be covered, how much time must be dedicated to each topic, what specific skills should be mastered, and how such content is to be delivered. Unlike polytechnics, the community college programs also rely heavily on practical, hands-on training as well as “theory.” The latter includes general education courses as well as lectures or other traditional delivery modes of instruction. The success of the practical training is that it is offered in partnership with “skill knowledge providers” (SKIPs). SKIPs are local businesses that agree to receive community college students and provide them with on-the-job training. Those interviewed reported that there was virtually no relationship between the polytechnics and industry before the



A faculty member and students in the library of the Ambedkar Polytechnic: Efforts to develop a multiple degree, multiple point entry system at this institution in New Delhi has created confusion and challenges.



community college concept was introduced. Now, SKIPs meet with polytechnic faculty and administrators regularly and community college students complete four hours a day of training with industry for a period of eight months. Local employers agreed to serve as SKIPs because it allows them to serve their community and produce the skilled workers they need while receiving some compensation for the training they offer.

A third significant difference between community college and polytechnic academic programs is that the former allow multi entry and multi exit points while the latter do not. A community college student who finds employment a year into his program may leave and return at a later date to complete the remaining courses and earn his diploma. The only condition is that community college students must complete a full year or 100 hours of instruction in order to obtain credit for what has been completed. This flexibility is currently not available to regular polytechnic students. Community colleges seem to have embraced the American model of open access. Anyone can enroll in these programs regardless of age, race, or economic standing. However, students must complete class VIII (primary and one more year in secondary school) in order to be considered for admission. Most of the students in Maharashtra seem to stay in high school as long as they can. The Secondary School Certificate (SSC) exam administered in the tenth grade usually determines whether they continue with their schooling. Those who fail the exam will not be considered for admission into a polytechnic or university and often discontinue their high school enrollment. The community college programs have been designed to serve students who have not passed the SSC and/or have dropped out of high school. However, several of the students we met at the Government Polytechnic Aurangabad initially enrolled in a standard diploma program and chose to switch to the community college programs because their courses were more dynamic and had higher job prospects. Despite the appeal of these programs among students of diverse ages and education backgrounds, there is concern among administrators that many in Indian society will see community colleges as the institutions that serve high school drop outs and the poorer, less privileged members of society.

Local industry in Aurangabad seems to have welcomed the new community college model of education. The new automotive program at this polytechnic currently has five industry partners. Fashion industry employers are pleased to see the new fashion design program trains women to produce garments on more advanced machinery while also learning basic business skills. Local hospitals and doctors are also thankful for the skilled workers the community college is providing. The only training that existed in the past for lower-level healthcare employees was provided by private, paramedic colleges with no certification. As a result, hospitals used to hire employees with no healthcare experience and train them on the job. Now community college students enrolled in the health-

care program are receiving better, more specialized instruction in their field of study while benefitting from hands-on training in hospitals. Contractors in the city also welcomed the new building construction program provided by the community college. Historically, most of the people working on construction sites in India have been illiterate and had little to no training. Workers have tended to represent the informal sector of the economy. Now the community college is producing trained, literate construction workers that can communicate more effectively with employers and build more reliable structures.

Students we interviewed like the opportunities and practical training that the community college programs offer. Students described the coursework as more interesting than some of their other educational experiences and seemed to most enjoy the applied skills they were learning. Many of the students who enrolled in these new programs worked full-time and appreciated the flexible school hours and part-time enrollment options. Through only two years old, this new pilot community college has been very well received by faculty, employers and students in Aurangabad and holds the promise of solving the existing skills gap in Maharashtra.

GOVERNMENT POLYTECHNIC PANAJI

The Government Polytechnic Panaji is the oldest polytechnic in the West Indian state of Goa. It was established in 1963, two years after India took control of the Portuguese colony of Goa. The student population of the Government Polytechnic Panaji has grown from 40 students in 1963 to nearly 1000 students today, making it the largest of the five polytechnics in the state. Since its inception, this institution has been primarily focused on educating engineers. It currently offers programs in civil, computer, electrical, mechanical, fabrication, and food technology engineering. Students must complete the SSC exam in the tenth grade in order to be admitted, and those who earn a diploma can transfer into in a bachelor's program at an Indian Institute of Technology (IIT) or university as sophomores. However, they will still need to complete three years of baccalaureate-level education. This 3+3 program is not stackable and too lengthy for most. As a result, few polytechnic graduates choose to continue with their education at an IIT or university.

Graduates from the Government Polytechnic Panaji have not encountered the same employment challenges experienced by other polytechnic graduates in the country. An estimated 80% of the students who graduate from this polytechnic find employment outside of Goa, especially in the Gulf States, the United Kingdom, and the many cruise ships that come to Panaji. Interestingly, their high English skills not their polytechnic training were credited as the main explanation for these high job placement rates. Unlike other parts of India, the schools on Goa deliver instruction primarily in English from kindergarten through the end of high school. The local language, Konkani, is taught in only one class a day during primary and secondary school. Hindi is taught beginning



Dr. Fuentes meets with administrators and faculty of the Government Polytechnic Panaji in Goa, which has been primarily focused on educating engineers.

Its graduates enjoy a high rate of employment outside of Goa, in part because the students have excellent English language skills.

Unlike in other parts of India, in Goa the schools deliver instruction primarily in English from kindergarten through the end of high school.

with the fifth standard onwards. As a result, most high school graduates in this state know English better than Hindi. Other foreign languages are also taught in addition to those mentioned above. This focus on foreign language acquisition together with the engineering curriculum taught at polytechnics has helped graduates from this institution find employment outside of the region and country.

Interestingly, the Government Polytechnic Panaji has been operating a community polytechnic since 1993 to provide outreach to rural areas of Goa. More specifically, they provide skills training, technology transfer, and support services to rural communities. Although fully funded by the Ministry of Human Resource Development, the community polytechnic does not offer degree or diploma programs and have not produced the skilled workers required by industry. They mainly represent an extension service provided by the polytechnic aimed at training rural workers to help them be more knowledgeable and productive.

During our visit in March, the faculty and administrators at the Government Polytechnic Panaji were preparing to initiate a new community college in June 2015 which was to be housed within the brick and mortar structure of the existing institution. Their goal was to provide practical vocational training to the large

percentage of Indian youth under 25 years of age with no practical skills. The academic programs to be offered beginning in 2015 were in Building Technology as well as Refrigeration and Air Conditioning. Polytechnic faculty and administrators had selected these two programs after meeting on several occasions with local industry representatives to determine what skilled workers they most needed. These meetings revealed that Goa's popularity as a major tourist destination and related construction boom in recent years had caused a shortage of skilled workers in building construction and refrigeration which the community college hoped to provide.

The administrators and faculty at the Government Polytechnic Panaji explained that the community college programs in Building Technology and Refrigeration and Air Conditioning were designed primarily for high school drop outs or, more specifically, students who completed at least an eighth grade education but never completed their SSC examination. Approximately two thirds of the curriculum was dedicated to providing hands-on, vocational skills to ensure that graduates are "industry ready." SKIPs were to provide this training from 9am to 4pm, and classroom instruction would provide more theoretical knowledge. The polytechnic signed memorandums of understanding with all SKIPs who were to provide this training and asked them to register online with the

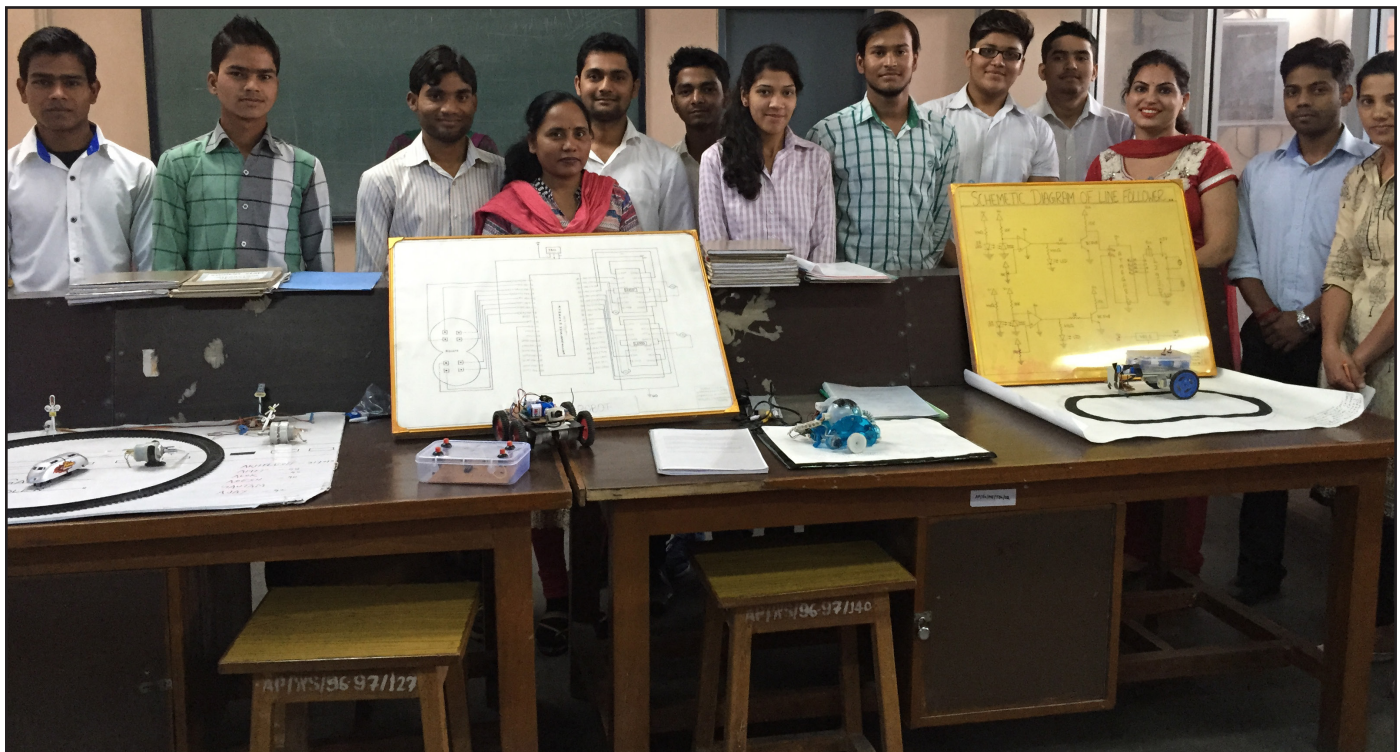
AICTE. Only a third of the community college curriculum was to be focused on “general education.” The latter was more comparable to remedial education in the United States. For example, communication courses were scheduled to cover topics such as how to start a conversation, greet people and take leave, express thanks, develop a paragraph, use proper punctuation, and use proper verbs. Mathematics courses were to cover topics such as how to identify units of measurement, use linear measurement tools, represent dimensions on drawings, and bookkeeping.

Staffing for the new community colleges will be provided by the existing polytechnic as well as industry professionals. Polytechnic faculty who work overtime to teach in the community college will be paid 5000 rupees per hour while industry professionals will be paid 4000 rupees per hour for skills-based training. All funding for the community college programs will be paid by the AICTE, unlike polytechnic funding which derives entirely from state government. The AICTE is providing grants to pay for any needed equipment, staffing, and other such needs. Community college students will be required to pay 6000 rupees per semester, and free tuition will be provided for financially weak students and members of “backward castes.” It is estimated that most community college students will qualify for free tuition.

The faculty and administrators at the Government Polytechnic

Panaji were very supportive of the community college model because it will allow them to reach out to high school drop outs and help this segment of the population enter mainstream Indian higher education and, eventually, the formal economy. It was acknowledged that some of the students preparing to enter the new programs in building technology and refrigeration had already obtained hands-on-training in these fields through the informal sector. The community college programs sought to formalize this training, fill any possible skills gaps, and verify that students had the training sought by employers. As one administrator at the college explained, “In India, you need a piece of paper to prove that you know something.”

Luis Fernandez, principal of this polytechnic since 2009, acknowledged that the community college model that they were preparing to implement in Panaji would be very different from the U.S. model. He had learned about the American system a few years earlier when he participated in a Fulbright program that allowed him to visit La Guardia Community College, Miami Dade College, Montgomery Community College, and one other peer institution in Washington, DC. Although he learned much about the American system and seemed impressed by it, he believed that Indian community colleges had to fit the Indian context, needs, and challenges.



Ambedkar Polytechnic, one of Asia’s largest such institutions, is in New Delhi, where these students are part of a program in Digital Electronics and Microprocessor System Design.

AMBEDKAR POLYTECHNIC IN NEW DELHI

Ambedkar Polytechnic in New Delhi was established in 1986 as a government engineering college and is one of the largest polytechnics in Asia serving over 1000 students a year. It provides three year degree programs in advanced and emerging areas of technology: instrumentation and control, digital electronics, medical electronics, computer engineering, and information technology. Like the Government Polytechnic Aurangabad, this polytechnic was the recipient of the “Best Polytechnic Award” in 2008. Their principal, Dr. Amitav Dev, also seemed more knowledgeable about national-level decisions and their impacts on polytechnics than other principals and administrators in Southern India. This may be due to her proximity to the national centers of decision-making power.

Dr. Amitav Dev explained that industrial training institutes (ITIs) provide skills development programs like those being offered in community colleges, but ITI programs last one to two years and are 80% skills based. They also offer six month certificate programs that are 100% skills-based and very similar to U.S. community college certificate programs. IITs are run by the state government and overseen by the Directorate General of Training (DGET) within the Ministry of Skill Development and Entrepreneurship. Dr. Dev understood that the AICTE hoped to provide more skills-based training through community colleges and narrow the skills gap between the education provided at polytechnics and the skills needed by industry. She further recognized that while polytechnics normally offer a curriculum that is 40% theoretical and 60% practical, nearly two thirds of the community college curriculum was focused on practical, skills-based instruction. Lastly, she acknowledged that polytechnics tend to have a weak relationship with industry and that community colleges are trying to correct this deficiency.

Despite the promise of the new community college pilot programs, Ambedkar Polytechnic had chosen not to pursue this option because they had experimented with a similar model in the past decade, the Technical Education Community Outreach Scheme (TECOS). TECOS was described as an unstructured program to provide free education and training to the downtrodden, underprivileged children of urban centers like New Delhi. The administrators and faculty at Ambedkar Polytechnic had worked with non-governmental organizations to identify community needs within a 20 km radius in order to implement TECOS. Although participants were able to earn government certificates, TECOS was viewed as more comparable to a community service than a degree program. The community college model proposed by AICTE was deemed similar to TECOS and, therefore, not very attractive.

Ambedkar Polytechnic instead chose to implement another new program being piloted by AICTE beginning with the 2015-2016 academic year: the Bachelors in Vocational Studies (BVoc). In

some ways this is comparable to the bachelors of applied science (BAS) that a growing number of community colleges are offering in the United States. The BVoc was described as an alternative to existing bachelor's degrees available through universities and IITs. Graduates from a three year polytechnic program will be able to complete a BVoc program with two additional years of study or transfer to a university or IIT where they can complete a bachelor's within three years. The BVoc program will enable polytechnic students to complete their bachelor's more quickly and make them more marketable. Thus far, industry has responded favorably to the new BVoc initiative. The University of Delhi College of Vocational Studies as well as other colleges in Andhra Pradesh were interested in experimenting with this new BVoc program.

The AICTE set a goal of piloting 100 BVocs as well as 100 community colleges within existing polytechnics. Polytechnics are allowed to launch one of these pilot programs, both, or none. Institutions interested in piloting a community college must send their proposal to the state government and then to AICTE. Those interested in launching a BVoc program must send their proposal to the state government and then to both the UGC and AICTE. The UGC is charged with overseeing the BVoc programs, while the AICTE will oversee the community colleges. Polytechnics interested in initiating a BVoc are required to collaborate with a university that will help develop the curriculum and approve the program. Central government officials hoped the new BVoc program would eliminate the division between the AICTE and UGC, but the administrators at Ambedkar Polytechnic felt sandwiched between these two national level institutions and state government.

Our visit to Ambedkar Polytechnic in New Delhi made clear that the AICTE is trying to develop a multiple degree, multiple point entry system that can facilitate vertical mobility for students attending Indian polytechnics. Although the overall goal is to reach a demographic that has been left out of the Indian higher education system, all of this experimentation has its challenges. As Dr. Dev explained, "Things are happening in a disintegrated manner," and "everyone is working in their own illusion." The community college and BVoc programs have been aligned differently and the links between the system and transfer options have not been explained clearly. As a result, many polytechnics may not understand the logic behind these recent AICTE pilot programs. Dr. Dev argued that more and better information should be given to polytechnics by central government officials. In addition, she believes that the transferability and portability of credit should be made possible in order to allow students to transfer to a different polytechnic or college if they choose to do so. Such an option was not available in March 2015. The UGC and AICTE are currently working on a concept paper that proposes developing a choice based credit system.

KERALA



A young woman, a student in a fashion design class, shows off the dress she created for her sister's wedding. She is enrolled at the Government Polytechnic Aurangabad.

The March 9-18 assessment trip included a short visit to one community college program established by the Maharajas Technological Institute in Thrichur. However, an FSU doctoral student under the supervision of Dr. Milligan, Mary Priya Jerry, has been conducted preliminary research for her dissertation on the community colleges being developed in Kerala. Her observations (below) offer ground-level insight into the implementation of the community college initiative in one Indian state.

The following report is a summary of findings from five meetings with various stakeholders in the community college program at Maharajas Technological Institute (MTI). The meetings were meant to be appraisals of the community college program running parallel to the traditional course within Maharajas Technical institute.

Meetings were held with the following participants:

- Faculty
- Skill Knowledge Providers
- Board of Management
- Board of Studies
- Parents

MTI is one of the five government institutions to receive grants to pilot the community college program in Kerala. The community college program at MTI is seen as an industry related teaching method. The program has been tied to companies like MGF motors, Ford, Hyundai and Popular Motors whose administrative and service representatives act as Skill Knowledge Providers (SKPs). Students in the program are supposed to have a combination of theoretical knowledge provided at the Institute and technical knowhow provided at the showroom and service centers of Ford, Hyundai and Popular Motors. The program is in its first year of running and is working parallel to the traditional course that has been in place in MTI for about fifty years. The vision for the program has been to have industry ready graduates prepared to take on real challenges in the workplace.

For the first batch 90 students were selected to participate in the program. It would be worthwhile to note that the students selected for the program are exceptionally weak students whose grades did not qualify them to enter the more coveted mainstream traditional program in place at MTI. In fact the program started late in August because admission of students could only be done after admissions to all other programs were completed. This was to ensure that students would not leave the program after it began.

These meetings with stakeholders, which took place for the first time since the program began in August 2014, helped to identify some important concerns. A common concern discussed by all stakeholders, especially the parents, was about the syllabus. A syllabus exists but a lot of the benchmarks have not been reached. It

was noted that additional class teaching time would be required as such students would not have a vacation. This was deemed alright because the course began late in August. Also it was noted that the students did not have a copy of the syllabus at the time of the meetings. The school year had not yet been defined at the beginning of the course and was this was also put down to the school year having started late in August.

The second concern of parents and students had to do with assessments. Right till the time of the meeting no assessments were administered to the students and no official records existed about their performance at the workshops. Students were asked to keep records of what they did daily but none were evaluated as looking at 90 students work on a daily basis was not logistically possible for SKPs or the instructors. SKPs at the workshop opined that discipline issues like absenteeism can be tackled with proper assessment. Final exams will be set and administered internally. However, they cannot be administered until an official exam date is set by the state government's controller of exams. As a result students don't know when the exam will be or how to prepare for it. As a result of the meetings there was an immediate thrust on identifying a suitable exam date as soon as possible and also increasing teaching hours even taking up holiday hours if needed. A general sense of confusion was palpable because the program is in its first year of operations.

The ninety students in the current batch were split into two groups of 45 students each. Each of these groups was sent to work/learn with workshops of Popular motors and Hyundai. Half way through the year students were rearranged based on accessibility issues and difficulties in commuting to the workshops. Accommodation and boarding outside the homes are not taken up by students because parents feel that the students are at an impressionable age and should not live far away from their homes and so parents and students prefer attending classes as day scholars. They also voiced concerns about their wards having to take up hard core work and a full day's work at the workshop because some of them are too young to have so much responsibility. For instance some students had to do chores requiring heavy work or menial tasks at the workshop and parents reported that their children felt humiliated. The principal and teachers reassured them by saying that it was part of the learning process.

Another interesting concern that parents communicated is that their children felt as though they were not part of the main college because they could not participate in internal activities like the college day and their uniforms were different from that of the mainstream students. The students were not allowed to participate in politics either. Although this could be seen as an advantage for these children (as politics often disrupts learning) they do not feel a sense of belonging and even feel like second class citizens at MTI. The parents also had some concerns about the teaching staff not

teaching during class times. The principal assured them that this would be looked into.

One thing that parents were happy about was that students were getting hands on learning experiences at workshops. Instructors reminded parents that their wards were some of the most academically weak students and so expectations should not be too high as to what they can accomplish unless they work hard.

After my visit to MTI in Trichur I visited the Government Polytechnic at Angadipuram, Perinthalmanna (which has a focus on automobile engineering) and The Institute of Printing and Government Polytechnic at Shornur (with a focus on Printing technology). At the end of these visits I might safely say that I have a better understanding of the workings of the community college programs in these places. At both colleges I met with the students and the parents of the students in the community college programs. I took written as well as oral feedback from the participants.

At the Perinthalmanna polytechnic about sixty students were present and about twenty five to thirty of their parents were also present. The students really opened up about what they thought was positive and negative about the program. They liked how the program allowed them to learn on the job together with theory learnt in the classroom but expressed dissatisfaction with some aspects of the working of the community college system. They hinted that it was the first time any formal feedback was being taken from them. The faculty members who were present denied this vehemently and insisted that they were very much accessible by students.

Most students who approached me after the meeting concluded they had a problem with the community college program being isolated from the mainstream conventional program. Many told me that they didn't feel valued at the polytechnic and did not have much of a student life. Some of the written feedback also echoed these sentiments. There were also complaints about the assessments and not having a course calendar at the beginning of the program. The principal and faculty members explained that this was because this was a pilot program and something that would be worked out in the course of time. Interestingly, the students at this polytechnic were selected based on their merit in the tenth board exams, unlike the weak students at MTI. The principal remarked that the polytechnic is quite popular at Perinthalmanna and advertisements in the newspaper attracted these students whose main goal in joining the program is to find a job after graduation.

The Institute of Printing and Government Polytechnic at Shornur seemed more successful in adopting the community college system. At the meeting all sixty students in the program were present with a sizeable representation from the parents. The prevailing atmosphere was cheerful. Unlike the automobile sector this program included girls as well. The students in the program hailed from low

SES families and had lower marks but had high expectations of the program. Both parents and students told me that what attracted them to the program was the promising prospects of jobs. They came to know of the program through the newspaper ads and the radio.

I thought a valuable suggestion from their part was to include advertisements on social media like Facebook. Despite coming from low SES backgrounds, without access to the net, these students all claimed to access social media like Facebook. It was also interesting to note that the girls in the group said that they did not access social media.

One of the major preoccupations of students and parents in all three colleges I have visited so far is whether the community college diploma will be considered by those hiring in the private and public sector. They fear that since the program is new, graduates from established programs may have an advantage over them. At the same time faculty, parents and students all agree that the community college is the way forward because it directly feels the pulse of the industry and students are job ready as soon as they graduate.

The problems noted at the other two colleges were conspicuously missing from this polytechnic. For instance the syllabus and course calendar were made available at the beginning of the course and the class hours have been completed as scheduled. I don't know if this is because of the nature of the subjects being taught or the efficiency of the faculty but from what I have observed I would be tempted to conclude the latter. The positive leadership at the helm may have something to do with this.

After the last reported visits to Perinthalmanna and Shornur I arranged meetings with community college coordinators at a women's college in Trichur (St. Mary's Women's college) on the 24th of June and to a men's college (St. Thomas Men's College) on the 25th of June. Both colleges are private aided degree colleges that come under Calicut University and funded by the UGC.

The women's college coordinator for community colleges told me that she is extremely well versed in the functioning of community colleges and has been working to promote community colleges in Kerala since 1995. As of now the college did not receive funding for a community college for the past year but instead received a grant for the bachelors in vocation (BVoc) degree program, which is similar to the community college program in having ties with industry in providing skills to the students. However, unlike the community college programs that grant diplomas, the BVOC is a three year degree program which differs from the traditional degree program in teaching students applications and skills in their majors. This particular college had BVoc in computer science. It reapplied for a package that includes a grant for the BVoc degree program as well as a community college program. The grant

amount would be approximately five crores for a period of three years. The college has applied a second time for this highly competitive package grant amount and is awaiting the result.

My discussion with the lecturer revealed an important caveat in the disbursement of grants. After three years the course would have to be self-financing and this would prove to be difficult unless fees are increased. This would be an eventuality that may discourage enrollment. The lecturer opined that this would also be the case with community college grants which would necessitate the host institution to create methods of self-finance. Other than this, the lecturer was quite optimistic and thrilled about the advent of the community college system in her college. She said that the program would satisfy the needs of both marginalized groups of women as well as students of middle class SES.

I got to meet with some of the students and they demonstrated their new found confidence in utilizing expensive equipment while they photographed us. The lecturer informed me that the purchase of the expensive camera that was being used was made possible by the grant money. She also explained that the grant had to be spent in ways stipulated by the UGC. Meeting with this lecturer was most helpful in gaining access to St. Thomas College for men. The men's college has a community college program in Visual Arts that has been in place for about six months.

I met with Dr. Biju, the coordinator of this program, and came to know of the unique opportunity afforded by this program. He told me that the program had a current capacity of 50 but only had 25 students enrolled. He attributed this to a couple of reasons. First of all students were hesitant to try a new program despite the fact that the UGC scheme students are even entitled to a stipend. The lecturer remarked that a similar program in Ernakulam would probably cost three to four times more (approximately one and half lakhs a year). Such a course would attract students under promises of job experience through working for celebrities who would even fail to show up. Students have not jumped at the opportunity despite it being inexpensive because it is not popular yet. Another reason is probably because enrollment began rather late (in December) compared to the other programs.

Dr. Biju also saw issues with the sustainability of finance for community colleges. If fees are increased in the third or fourth year of functioning, it would discourage enrollment by the very type of student that community colleges hope to attract as the marginalized poor cannot hope to benefit from such ventures if the cost for education goes up. As of now the program is entirely dependent on the grant allotted to it by the UGC.

One thing that was particularly interesting to note was that at both aided colleges that came under the UGC the infrastructure was in far better condition than the previously visited colleges that came

under the AICTE. The buildings were in far better states of repair. The community college program at St Thomas had an entire block allotted to it with state of the art labs and was well equipped to train students in visual communication. I did not get access to meet all of the students like I did at previous locations because these meetings with the lecturers/coordinators were semi-formal exploratory meetings. Like at the AICTE polytechnics I was given to understand that getting industry partners did not pose a problem at all to the coordinators at both colleges because industrial and business employers find it far more efficient and lucrative to train these students in relevant skills and employing them thanks to the reduced skill gap found in students graduating from community college courses. For instance, one lecturer said that while students from the traditional course did one or two projects at the end of the third year, students in B Voc finished six projects, worked on documentaries, designed websites and so forth in the very first year.

RECOMMENDATIONS FOR CCAP WITH INDIA

The report on the 2014 Fulbright-Nehru Higher Education Seminar offered several recommendations for future programs that may be useful for the CCAP with India:

- Meet members of advisory committees. Community college vocational programs have industry advisory committees that advise the college on the content and structure of programs relevant to their particular industries. Meetings with advisory committee members could be arranged for CCAP participants.
- More opportunities to meet with students.
- Talk about process and problems. Colleges visited in the US naturally want to showcase their best programs and their greatest successes. It would be helpful to also discuss problems and how they were/are addressed.
- Visit a four-year college. This is easily done since the CCAP with India will start on the FSU campus. We could invite admissions staff to talk about transfer issues from the perspective of the university.
- Explore funding-raising from the private sector.

Additional recommendations based on the March 2015 assessment trip:

- Articulation and common course transfer systems are areas of growing interest in Indian higher education. CCAP participants will benefit from learning more about Florida's articulation and common course numbering system. This may allow them to explore how to provide more vertical and horizontal mobility to Indian college students.

- Flexible enrollment options are also being explored in Indian higher education. CCAP participants would benefit from learning how part-time enrollment is defined in the United States and how we preserve course credit even for students who periodically cease attending college.
- Faculty Training programs are scant throughout India. Administrators and faculty are interested in learning how we provide training about emerging technologies, best teaching techniques, and student assessment.
- Student services like those provided in U.S. higher education institutions are rare in India. Faculty and administrators were interested in learning how we provide academic advising, counseling, and extracurricular activities that help keep students engaged. They also would benefit from learning about our library system and disabled students services.
- Curriculum Design for community colleges is currently undertaken by AICTE. However, it would be helpful to show Indian CCAP participants the role U.S. community college faculty play in designing curriculum.