

A Passage to India: A Case Study of Harvard's Division of Continuing Education and the Indian Computer Academy

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The Sunday, August 1, 1993 edition of the *Washington Post* featured the headline: "Indians, Foreigners Build Silicon Valley in Bangalore." In the article, Bangalore, a city of more than four million people, was described as "an island of relative affluence and social stability in this ancient land." Multinational high-tech firms, such as IBM, Texas Instruments, Digital, and Hewlett-Packard, had opened offices in Bangalore, attracted by its "temperate climate and low-wage but well-educated labor pool." That Bangalore was a mecca for computer-trained graduate students came as no surprise to Harvard's Division of Continuing Education (DCE), which had been working to establish the Indian Computer Academy (ICA) since 1988. The surprise was that by 1994 the joint collaboration ended in ruins despite an appropriate level of groundwork, partners with excellent academic and financial credentials, and a high level of need for the kind of graduates the ICA wished to produce.

A Boston businessman with strong ties to India whose company had offices in Dedham, Massachusetts, and Bombay, India, was familiar with the reputation of the computer course program of the Harvard Extension School. In the spring of 1988 he approached Drs. Paul Bamberg and Henry Leitner, Director and Associate Director of Science Instruction for Continu-

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ing Education, respectively, to discuss the possibility of a joint educational venture that he was willing to fund.

Drs. Bamberg and Leitner had developed over the years a core curriculum in computer science at Harvard for courses in the Extension and Summer Schools leading to a Harvard Extension School graduate Certificate in Applied Sciences (CAS) designed to train adult students to serve the needs of the local high technology industry in Greater Boston. Upon reflection, they considered it feasible to effect a technology transfer of the Harvard core curriculum to a proposed computer academy in India using the Harvard Extension curriculum and training teachers to use that curriculum in India, for the benefit of Indian college graduates seeking employment in the emerging Indian software industry.

In the summer of 1989 Dr. Bamberg, in the company of the Indian entrepreneur from Boston, undertook an onsite survey of the situation in India, traveling to Delhi, Bombay, and Bangalore, and meeting with key representatives from government, industry, and academe. On their last day the team met with the chairman of Mothercare India Limited, a company traded on the Bombay Stock Exchange that was doing well financially. He was to be a co-leader of the Indian Computer Academy project and would take on the key role of chief administrator of the ICA. During this meeting, the participants addressed key issues of academic standards, facilities and equipment, staff, protection of the Harvard name, and future directions. The initial scope was grandiose, calling for "plans to open in Bombay and Bangalore in 1990, to expand to Delhi and Madras in 1991, then to Hyderabad and Pune in 1992." After more realistic reflection it was decided to locate the Indian Computer Academy in Bangalore because the city was evolving as the center of the burgeoning high technology industry of India, very much like the Silicon Valley in California.

Upon returning from their twelve-day fact-finding trip the team filed a detailed report that recommended "that Harvard conclude an agreement with the Indian Computer Academy to provide curriculum for four courses to train instructors for these courses, to write and grade all final examinations and a random sample of software projects, and to write an annual evaluation." The agreement also would stipulate that "the Academy would have full responsibility for finding classroom space, acquiring equipment, recruiting faculty, selecting students, and developing courses beyond the basic curriculum."

It was not until fall 1990 that Harvard's Division of Continuing Education entered into a formal agreement with the newly incorporated Indian Computer Academy in Bangalore. On October 9, 1990 the Office of the General Counsel at Harvard sent the Dean of Continuing Education and University Extension a copy of "Harvard's signed agreement with the Indian Computer Academy." A substantial grant from Citibank enabled Drs. Bamberg and Leitner to revise all their teaching materials, based on their Harvard courses, for the core curriculum of the ICA. Funding was also made available for two ICA faculty members to attend the Harvard Summer School for training in the new curriculum.

The plan was to offer a core curriculum that was the equivalent of a half-year of full-time study at Harvard Extension and Summer Schools leading to the CAS. The students would be expected to devote at least 20 hours a week to programming on personal computers, to take the identical mastery tests as Harvard students, and to complete the same kind of software projects. A comprehensive six-hour examination would be administered at the ICA and graded at Harvard with the assistance of teaching fellows. Harvard Extension School would maintain the records of all ICA students, their graded examinations, and their accumulated credits for ICA certification. ICA students would be expected to perform at the same level of proficiency as Harvard Extension or Summer School students in their comprehensive examinations, and student software projects would be sent from the ICA to Harvard for grading by an examining committee. To guarantee that the quality of instruction and learning were on a par with Harvard Extension School standards, representatives from Harvard—both teaching faculty and senior administrative staff—would conduct yearly visits to the ICA in Bangalore.

To ensure a central role for Harvard's Division of Continuing Education in the ICA, it was agreed that I, as Dean of the Division, would chair both the Board of Trustees and the ICA Advisory Board. In addition to myself, the former included the two co-leaders, two others from Mothercare, a venture capitalist, and someone from Citibank, Bombay. The presence of so many businessmen, especially from Mothercare and a venture capitalist firm, should have set off an alarm that the ICA was regarded as a for-profit undertaking on the part of the principals in Bangalore, but at this juncture we were pleased to have accomplished so much in a relatively short time, at least by the standards of academic bureaucracy.

The main responsibility of the Board of Trustees was to ensure the ef-

ficient overall operation of the ICA, but at the maiden meeting of the Board in Bangalore on January 6, 1992, it was clear that the Board was controlled by the financial investors in the Academy, with the chairman of Mothercare explaining the status of the project in terms of the lease arrangement for the building and related matters of the infrastructure as well as the projected fees for full-time students (25,000 rupees) and the starting dates for the first and second batches of full-time students, March and August 1992. Dr. Bamberg, who was present at the meeting as an invited guest, recalled later that the discussion was mostly in financial terms, with little attention paid to academic matters.

The membership of the ICA Advisory Board was constituted with Dr. Bamberg (Harvard) and representatives from the local Indian business community, including software and hardware firms. The role of the Advisory Board was to ensure that the ICA curriculum met the needs of the Indian computer industry and that students were placed in suitable internships as part of their program of studies. Academic quality assurance would be determined by on-site visits of Harvard Extension School faculty and senior administrators, and by Harvard grading of the comprehensive examinations and the software projects.

In late March and early April 1991 Drs. Bamberg and Leitner traveled to Bangalore to interview prospective ICA teachers who would attend the Harvard Summer School and become proficient in the core curriculum. By October 1991 an academic dean had been hired to administer the academic side of the operation, such as hiring faculty, admitting students, and maintaining academic standards in introducing the Harvard Extension School core curriculum in computer science. We were fortunate in selecting Dr. Regeti Govindarajulu, a professor of computer science at the Regional Engineering College in Warangal, and over the next two years he proved himself to be a dedicated, honest, and able administrator and teacher committed to upholding the academic integrity of the ICA. Construction of the ICA facility was ongoing and on track to meet the goal of having the academic dean in place by the fall and opening the Academy to students in January 1992. To preside over the inauguration of the ICA in January, Dr. Bamberg flew to Bangalore.

The inauguration of the ICA in early January 1992 was hailed in the Indian press as a major event. *The Times of India* in Bombay on January 9 featured the headline: "Harvard to Aid Software School." The *New Delhi*

Financial Express on January 10 announced "Harvard-Assisted Computer Software Institute Set Up." Both articles cited the participation of Dr. Bamberg, Director of Science Instruction for Continuing Education at Harvard, at the inauguration of the Indian Computer Academy in Bangalore along with a number of distinguished guests, including P. Chidambaram, India's Minister of Commerce. As Dr. Bamberg later remarked, "The inaugural ceremony was held on an astrologically auspicious day and time in which I participated in an oil lamp lighting ritual." This academic technology transfer of computer courses from the banks of the Charles River in Cambridge to the banks of Sankey Lake in Bangalore marked the first time that University Extension at Harvard created a learning center outside of Boston in more than eighty years of continuous operation.

In late March 1992 Dr. Leitner and I flew to India to inspect the ICA, where I chaired the meeting of the Board of Trustees. The business of the board was routine, with favorable reports on student grades, on financial status, and projections for the forthcoming year. There was no reason to suspect that things were not going well.

This impression was reinforced when in the summer of 1992 Professor Gerald Sacks, Professor of Mathematical Logic at Harvard and MIT, flew to Bangalore for several weeks to teach advanced courses on Windows programming at the ICA. The academic work of the first and second groups of students on the comprehensive examinations graded at Harvard proved promising and the consensus was that the Harvard curriculum was a success.

But the positive academic results were offset by complaints emanating from the ICA academic dean, Dr. Govindarajulu, that bills were not being paid promptly and that there were delays in faculty salaries. Students also wrote to complain that tuition deposits were not refunded and that the ICA facilities often were inoperable. Harvard Continuing Education senior staff sent faxes to the ICA to ascertain why these complaints were coming in, but they were not successful in getting appropriate replies.

By the time of the next meeting of the Board of Trustees in January 1993 at Harvard it was becoming increasingly evident that the ICA was facing serious financial and administrative problems; however favorable the alignment of the stars the year before, the situation on site had deteriorated, so much so that the Board resolved that Citibank be authorized to appoint an independent auditor to audit the ICA books for the fiscal year 1992-93, and, if necessary, for the preceding year as well.

The auditor used for the ICA in 1991–92 also audited Mothercare, a situation that constituted a conflict of interest. The Mothercare chairman was asked to turn over all the financial records of the ICA to the new auditor in the spring of 1993. He was initially reluctant but eventually admitted that his manager had left the books a mess, and in the modern-day equivalent of “my dog ate my homework” said that the computer system had crashed and destroyed the records. By summer he finally produced some partially reconstructed books for part of 1992, but there were no supporting documents and therefore the books could not be audited.

At the January 1993 meeting the Board also resolved that Mothercare and the ICA be separated administratively, with my assuming responsibility for management of the ICA until a business dean and an accountant were in place. Financially, Mothercare would approve temporary loans to cover a shortfall in the ICA 1992 budget and Twentieth Century Venture Capital (TCVC) would postpone its loan repayment schedule.

Shortly thereafter a Harvard Extension School faculty member, after a three-week teaching tour at the ICA in February and March 1993, filed an eyewitness confidential report that documented the crisis at the Indian Computer Academy. He described “the ICA’s infrastructure as crumbling,” from a “lack of modern computers” to poor lighting, broken desks and chairs, and even the absence of toilet paper in the bathrooms. His discussions with students, faculty, and industry representatives “about the course of study at the ICA ... were by and large positive.” Students complained, however, that they came “primarily because of the Harvard name, but the actual product falls far short of the expectations raised by that name.” Faculty morale was “low” because they were poorly treated and “they feel that the students are being cheated, and they don’t like being agents of it.” The Advisory Board “has met only once” and they are too busy to ensure academic standards or oversight. The Library “is not operational in any sense of the word,” containing few books, no periodicals, and no copies of software or videotapes as promised in the catalog. Although the catalog states that “the Academy will offer scholarships to deserving candidates, nobody has received any form of scholarship aid.” He sensed a palpable conflict between the ICA dean, Dr. Govindarajulu, who wanted to maintain academic standards and enhance the reputation of the Academy, and the two Indian project co-leaders, who wanted to lower standards in order to enroll more students and collect their tuition. Financial mismanagement had sent the ICA “on a downward spiral” because “the infrastructure,

the day-to-day operations, the relations with industry [were] not good, and getting worse instead of better." Despite the potential of the ICA, the excellence of the dean academically, the high motivation of the students, the quality of the Harvard course materials, the conclusion of the report was that unless Harvard took drastic action to set things right financially and administratively, there was no future for the ICA and great potential "damage to Harvard's educational brand name."

A preliminary auditor's report on April 13 detailed assorted "proprietary lapses, apart from a number of systemic and control issues" with the ICA accounts. As a senior Citibank official commented on the audit of the ICA books: "It works like a Greek tragedy."

The rest of 1993 saw a long arc of crises. On July 2 a senior Citibank officer in Bombay wrote a disturbing summary of the findings of the A. F. Ferguson audit, noting that the audit was perforce incomplete because of difficulties in obtaining documents and supporting sources from ICA's managing trustees, "particularly relating to the year 1991-92," but the results nonetheless were as follows:

1. "Statutory non-compliance.
2. Irregularities in operation of the bank accounts, inadequate control, impropriety in handling cash receipts and payments.
3. Improprieties in certain items of expenditure, unexplained differences in income recognition and non-provision of bank accounts transaction details.
4. Lack of financial viability and consignment impact on the quality of facilities."

According to the Citibank evaluation of the audit, items 2 and 3 were "of a fundamentally serious nature and may have spurred the current crisis." Among the improprieties cited in the audit was the lack of supporting receipts to a number of payments, the use of ICA funds for non-ICA expenses by Mothercare, the unexplained withdrawals from ICA bank accounts, the withdrawals of cash for unspecified use.

Whereas earlier in the year the Mothercare chairman had written to say that the Board's resolutions regarding Mothercare had all been complied with, I received a telephone call from Dean Gonvindarajulu in early June stating that Mothercare still had not turned over control of ICA bank accounts to him as agreed, and that the ICA faculty and staff had not been paid

their salaries for May, although contractors had been paid with postdated checks. The remainder of the month of June saw a deepening of the crisis at the ICA, with letters and faxes coming to Harvard from many of the principals involved. Toward the end of June Dean Govindarajulu made public his decision not to remain at the ICA beyond his initial two-year contract.

By August 1993, I had a clear sense of the dimensions of the crisis, but decided to wait until I met with the Board in India (Bombay and Bangalore) before taking any action. The issues confronting the ICA were academic, financial, logistical, and administrative. Harvard had met its obligations by providing the academic course material, training, and help, but the performance of ICA's students had declined. Dean Govindarajulu subsequently confirmed that the last cohort of admitted students was admitted with lower grades (and without his approval) in order to provide tuition revenue, a not uncommon practice. The ICA's enormous cash flow difficulties resulted from a combination of too-high tuition, no guarantee for student loans, a lack of industry support for internships, and unsuccessful fundraising. The rented facilities, whose lease was expiring at the end of 1993, were run down and the computer lab needed to be upgraded. Important administrative and academic (librarian, faculty) functions were unfilled, unsupported, or inadequately performed.

Having seen for myself the disarray that permeated the entire project, I decided to begin taking the necessary steps to separate the Division of Continuing Education from the ICA. When the Board of Trustees met at the ICA on August 30, I met in private executive session with the representatives of Mothercare and the venture capital firm to inform them that Harvard's Division of Continuing Education would officially withdraw from the agreement signed in September 1990. In a subsequent confirmatory letter dated September 7, I clearly outlined the situation from Harvard's perspective: "...the ICA had ninety (90) days since September 1, 1993 to clear up issues of financial mismanagement through another independent audit of Mothercare/ ICA books for 1991-92 and 1992-93, to secure new sponsorship for the ICA, and to hire a new academic dean for the ICA." I concluded by saying that "if neither the ICA can resolve satisfactorily the outstanding issues nor a suitable sponsoring agent can be located by December 15, 1993, then Harvard University Division of Continuing Education will make public its termination of the Agreement with the ICA effective September 1, 1993 and fulfill its only remaining commitments to examining and grading the fourth and final batch of thirty students cur-

rently enrolled in the ICA." A copy of this letter was sent to the Harvard University General Counsel's Office.

Although I had tendered the withdrawal notice, I worked assiduously in finding a suitable new sponsor for the ICA. That same day, September 7, I wrote to the director of the Tata consultancy to explore an association with Tata. Dr. Bamberg and I had met with Tata officials in Bombay and Bangalore during our trip to India in late August and early September. Despite such overtures, no suitable sponsors for the ICA eventually were located and it became time to go public with the decision to withdraw from the ICA.

Even though Harvard DCE had stepped out of the picture, we still felt a moral obligation to the ICA and its faculty and students. Accordingly, I sent a check in the amount of \$10,000 to Citibank India to "provide the necessary funds to keep the ICA operational until the fourth batch is through its training by the end of February." With this check the ICA account at Harvard was emptied of all funds, and any additional funding would have to come from other sources. Harvard DCE promised to provide references to ICA faculty and staff, as they sought new employment, and to ICA students who were interested and able, the opportunity to come to Harvard and complete the additional four courses for a graduate Certificate in Applied Sciences, an option that several students did pursue and completed successfully.

Before I convened a final meeting of the Board of Trustees at Harvard in February 1994, I received a distress fax from the ICA acting dean describing a worsened situation at the ICA, especially with regard to the lack of funding to pay vendors. The February board meeting formalized what was inevitable, the severing of ties between Harvard DCE and the Indian Computer Academy. Immediately afterwards Drs. Bamberg, Leitner, and I issued a public statement to the students, faculty, and staff of the Academy as well as a press release for distribution in local newspapers and computer publications.

Following the formal notice of Harvard DCE's withdrawal, a flurry of faxes ensued, including one from the acting dean expressing his distress at the news and his bleak "prospect of taking on the unenviable task of presiding over the funeral rites of the ICA." In late April he wrote: "Given the present circumstances and no inkling of the shape of things to come, I have but one option—to close the academy to prevent future shock. This I propose to do on April 30, 1994."

The press in Bangalore on April 21, 1994 highlighted the key events of the Indian Computer Academy from its launch to its demise: "Two years

after its launch, the Indian Computer Academy's partner pulls out, leaving the institute in a sorry state." A sidebar to the article summarized: "What really seems to be ailing ICA is the lack of a responsible and accountable person to handle funds."

The public announcement from Harvard's Division of Continuing Education (DCE) provided the substance of the article, which stated that "DCE Dean Michael Shinagel cited financial and management problems at Bangalore as the reason for withdrawing the sponsorship." In its two years of operation, the ICA trained "approximately 150 students." The article concluded that "ICA's main assets remain the Harvard trained faculty and the experience gained over the past two years. However, the Harvard saga will end with the final batch of students passing out in March this year." The article had acknowledged that "Harvard DCE [imparted] its expertise in a pro bono manner," and that this marked the first time that it "was lending its name to any institution outside Cambridge." But this promising and well-intentioned project, despite the best efforts of dedicated teachers, administrators, and supporters, failed to succeed. All that could be done at the end was "to congratulate publicly Dean Regeti Govindarajulu as well as the entire ICA faculty and student body for their outstanding achievements in the face of very difficult circumstances."

To gain some valuable perspective on the failed Indian Computer Academy project, I consulted with John Kenneth Galbraith, Warburg Professor of Economics, Emeritus, at Harvard and former Ambassador to India in the John F. Kennedy Administration. Professor Galbraith remarked that it was not surprising that the enterprise failed because it was impossible to administer an academic program 8,000 miles from Harvard and to rely on the oversight and commitment of principals locally in India whose motives were more monetary than academic.

Indeed, we did not fully appreciate that no matter how well intentioned or altruistic, businessmen give priority to return on investment rather than academic standards, and that this is especially true in India. As N. Jayaram explains in *World Class Worldwide: Transforming Research Universities in Asia and Latin America*, Indian higher education is a complex network of institutions concerned more with "retailing knowledge" than the quality of the academic experience. The already significant cultural differences between commerce and academe were heightened in this particular case, and though we may have been in the right place at the right time, we could have had more safeguards in place, beginning with a realistic appraisal of the funding

and physical infrastructure necessary for the start up as well as a detailed business plan that included a marketing strategy.

When the academic quality of the ICA was compromised, Harvard had no recourse but to withdraw its good name and its involvement with the project. It was a major disappointment to all the people from Harvard who worked on behalf of the ICA from its inception to its closing. A hard lesson was learned, and at a time when globalization and the lure of other markets make it difficult to resist the impulse to undertake overseas collaborations, we hope our continuing education colleagues will benefit from our experience. 🌐