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## THE CHALLENGE OF ASYMMETRY

The success of the MIT-Japan internship needs to be evaluated in light of what Richard Samuels, the Program's Director, called "the asymmetries between Japanese students coming to the United States and American students going to Japan." First, the students are different. Japanese students in the United States usually come from firms, and have jobs and defined career paths to return to - all of which helps them focus on specific questions or technologies to explore while in the United States. American students in Japan usually come from universities, are recent undergraduates, are not going from or returning to companies, and are usually seeking a broader experience. Generally, the Japanese students have spent more years (perhaps ten) studying English than the Americans have spent studying Japanese (two years in the MIT case). Even though conversational English is not a strong point in Japan, most professionals have a good reading knowledge of English and a good vocabulary. Second, the sources of technology are different. In the United States, Japanese researchers can get access to manufacturing research and technology in universities; in Japan, most of the best research and development is done in private corporations. Thus, American students need to go to Japanese companies, which is harder to arrange than for a Japanese person to enter an American university.

The MIT program has established a good model for exposing young scientists and engineers to Japanese research, development, and manufacturing methods. Several departments at MIT send some of their best students through the program, and the numbers are growing. In the first five years, 1983-88, thirty-three interns went through the program; twenty took part in 1988-89, and forty were accepted as candidates for the following year, 1989-90. That MIT-JSTP has also been successful in reaching industry is shown by the fact that thirteen corporations sponsor the program, and that company requests for seminar programs on Japanese culture are numerous. The internship program seems to be well-received in the Japanese laboratories, as more students are finding places in the Japanese research system. The program is still new but its reputation as well as its size is growing. It is premature to assess the effect of the interns in American companies because there have not been very many so far, a good half go on for further schooling rather than to work, and the experience of those who have taken jobs is brief. When the interns have had more experience in American industry, the benefits of speaking Japanese and exposure to Japanese research methods can be better evaluated.