

## **Cooperative Relationships with Malaysian Institutes of Higher Learning: Quality Control**

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### Introduction

Indiana University, and the Purdue School of Engineering and Technology at Indiana University Purdue University Indianapolis (IUPUI), have been offering credited course work in Malaysia since 1985. The credits earned in Malaysia appear on the Indiana University transcript and may be considered for transfer credit at any university where students wish to transfer.

The Purdue School of Engineering and Technology at IUPUI, in cooperation with Indiana University and Purdue University, currently offers credits in Malaysia at the request of Tenaga Nasional Berhad (TNB), Malaysia's national power company. The students major either in electrical or mechanical engineering. They earn two years or more of credit on site in Malaysia and then transfer to IUPUI or to other universities to earn Bachelor of Science degrees.

### Standards and Quality Control

How has Indiana University and its various schools, specifically the Purdue School of Engineering and Technology at IUPUI, established standards and maintained quality in offering credits in Malaysia?

The North Central Association of Colleges and Universities (NCA), and the Accreditation Board for Engineering and Technology (ABET), have only recently begun to discuss standards that would apply specifically to U.S. universities with operations abroad. In the summer of 1994, the Center for Quality Assurance in International Education co-sponsored an ad hoc meeting of national association representatives to explore the question, "Does U.S. higher education need a foreign policy?" A follow up meeting was held in December. The result was a set of standards put forth for discussion by Steve Crowe, Deputy Director, North Central Association of Colleges and Universities. The standards were later revised and published as "A Voluntary Presentation of Standards for U.S. Institutions Offering Credit - Bearing Programs Abroad."<sup>[1]</sup>

Analysis: Standards and Quality Control, Purdue School of Engineering and Technology Malaysia Program, IUPUI.

A. Goals and Objectives of the Program

According to the "voluntary presentation of standards" referenced above, there are two components to consider when evaluating the goals and objectives of offering credit - bearing programs abroad:

1. Proposed standard:

Do the goals and objectives serve the needs of the students of the host country and the host institution abroad?

The following points can be made in answer:

Goal: To provide degree - path academic programs at the in - service, technical training institute of Tenaga Nasional Berhad.

In 1994, the Tenaga technical training institute had no capability to offer academic programs leading to degrees. By August of 1997, 148 students had completed a full two years of degree applicable credit on site in Malaysia and had transferred to universities in the United States to pursue degrees in electrical or mechanical engineering.

Goal: To assist in the establishment of the academic infrastructure required to establish and sustain independent academic programs.

IUPUI faculty and staff members have been active participants in the development of physics, chemistry, and engineering laboratories, and the library design and staffing plan. Technical staff have designed and guided installation of a campus - wide network with options to make use of the latest techniques in instructional technology and to establish electronic links with other universities and information centers throughout the world. IUPUI support staff have played a major role in the development of a student - records system. IUPUI faculty members have worked in collaboration with local faculty members and have held regular professional - development seminars and workshops.

In July 1997, Tenaga launched its first degree programs under the name Universiti Tenaga Nasional (UNITEN). In the interim between 1994 and 1997, IUPUI credit - bearing programs were essential to the function of the newly planned university. The presence of the IUPUI program accelerated the installation of academic infrastructure, helped attract students to the newly planned university, and established a reputation for quality that UNITEN plans to enhance.

Goal: To export the curriculum of the Purdue School of Engineering and Technology at IUPUI and deliver it on site in Malaysia with a level of quality that would prepare students for completion of degree requirements in the U.S.A.

One measure of quality has been the success of the students in the U.S.A. A recent analysis tracked the progress of 59 students who had earned two years of IUPUI credit in Malaysia and who had also completed two full semesters of credit at either the home

campus of IUPUI in Indianapolis or the main campus of Purdue University in West Lafayette, Indiana. As a group, these students left Malaysia with a cumulative grade point average (CGPA) of 2.9573. After two semesters in the U.S.A., the average CGPA had risen slightly to 2.9676. We conclude that students do about as well in the U.S.A. as they do in the IUPUI program in Malaysia, and we take that as a measure that the quality of the program in Malaysia is on par.

2. Proposed standard:

Do the goals and objectives serve the mission of the university?

Goal: Indiana residents enrolled in degree programs at the Purdue School of Engineering and Technology at IUPUI will benefit from the School's program in Malaysia.

The following points can be made in answer:

Teaching

Faculty members of the Indiana University system assigned to teach in Malaysia gain international perspective and improve their teaching technique. Malaysian students bring to the classroom a cultural and educational background that is quite different from that of the typical Indiana resident. Most faculty members adjust their approach to teaching in response to these differences, and many gain insight into their technique as a result. In the long run, students who are resident of Indiana benefit from the resulting refinement of technique.

Classroom dynamic

As of January 1998, one hundred-twenty two Malaysian students were enrolled in engineering programs on the home campus of IUPUI as a result of the agreement with Tenaga Nasional. Their participation in classroom and laboratory sessions enriches the learning environment for Indiana residents, providing Hoosiers with greater opportunity to develop international perspective. Collaboration among classmates of varied backgrounds encourages greater understanding of an increasingly interdependent world economy. Careers will benefit as Indiana employers come to value the broader world view of graduates.

## B. Content, Structure, and Rigor of the Course / Program Offerings

The "voluntary presentations of standards" contain several points to consider in setting standards for content, structure, and rigor of the course:

1. Proposed standard:

The home campus departments supervise the credits offered at the host institution abroad.

The IUPUI / UNITEN program has met this criteria. The syllabus, textbooks, and supporting course materials are specified by the home department for each content area. A chief academic officer on site monitors quality and ensures that faculty members adhere to the prescribed syllabi. Only the home department can approve textbook changes. Committees at home departments review the qualifications of adjunct and visiting faculty members. No one is assigned to teach a class without written approval from the home department.

2. Proposed standard:

The home departments apply the same standards to the course offerings as those held at the home campus.

Students of the IUPUI / UNITEN program, once accepted, are entered into the registrar's system at the home campus. Procedures for academic honors as well as probation and dismissal are applied in the same way as on the home campus and according to the Purdue University Bulletin, School of Engineering and Technology, IUPUI.

3. Proposed standard:

The curriculum "...includes content relevant to the needs of the students as defined by (the host institution)."

About one - fourth of the students of the IUPUI / UNITEN program are Tenaga employees. Others are recent high school graduates, many on scholarships requiring that they work for Tenaga if the company requests their services after graduation. During the first two years of study, all students are enrolled in at least one hands on technical course designed by the host institution and related to the power industry. Furthermore, the host institution arranges for a course in Malaysian history and culture and another in comparative religion. IUPUI accepts these as transfer credit applicable to humanities requirements. Through the hands - on training offered by Tenaga, and through the humanities electives, the IUPUI / UNITEN program meets the standard of including content deemed relevant by the host institution.

4. Proposed standard:

The home institution assures language competence of the student body.

The IUPUI / UNITEN program uses the Test of English as a Foreign Language (TOEFL) to certify the language competence of students. The minimum acceptable score is 550, or 520 for students who have successfully completed a semester of remediation before entering the academic program.

### C. Admission to the Program

Proposed standard:

The home institution establishes and publishes the admission requirements for its international course offerings.

Students are recruited by the host institution, Universiti Tenaga Nasional. Dossiers are sent directly to the admissions office at the home campus of IUPUI and reviewed in the same manner as other international applicants. IUPUI does not recruit students for the program.

## D. Human Resources to Support the Program

### 1. Proposed standard:

The administrative structures and personnel of the home campus are capable of fulfilling the institution's responsibilities for oversight of the course offerings.

Course work bearing IUPUI credit has been offered in Malaysia since 1985 through a cooperative effort of Malaysia's Institute of Technology MARA, Indiana University, and the Midwest Universities Consortium for International Activities. With Indiana University as the lead institution within the consortium, more than 3,000 students of Institute of Technology MARA earned credit from academic departments at IUPUI and Indiana University, Bloomington. As a result, Indiana University had an established structure of home office support for a program of this type. In fact, there was a productive overlap of personnel function and expertise as one Malaysia program was phased out and another sprung up in its place.

### 2. Proposed standard:

"A resident director, employed by the home institution, provides primary oversight..."

From the start, a faculty member of the Purdue School of Engineering and Technology has been on site to support the IUPUI faculty and monitor implementation of contract terms. The person serves as both chief academic officer and chief of party. As such, the teaching load is reduced so that the person can devote 50% or more of his / her time to administrative duties.

### 3. Proposed standard:

The teaching faculty has appropriate qualifications.

All prospective faculty members must be approved by corresponding departments at the home campus of IUPUI. The departments ask an essential question: If we had an opening, would this person be an acceptable candidate? The departments require a minimum of Master's degree in the specified academic area and two years of experience teaching similar courses at the undergraduate level.

### 4. Proposed standard:

The teaching faculty is familiar with U.S. education.

Experience teaching similar courses in a U.S. undergraduate program is an important criteria in selecting faculty members for the IUPUI/ UNITEN program. In a few cases, faculty members unfamiliar with the U.S. system have been approved to teach IUPUI courses in the program. In such cases, a close mentoring relationship is established to promote fast adaptation to the U.S. system, particularly with respect to methods to monitor student performance regularly. The chief academic officer on site assigns and monitors the mentoring relationship.

5. Proposed standard:

The home campus systems of evaluation and reward recognize the contributions of staff and teaching faculty recruited from the home campus to serve at an international site.

It is an open question whether IUPUI has met this standard. International experience may be valued highly in some departments and ignored in others.

6. Proposed standard:

The teaching faculty have the language proficiency necessary to fulfill their responsibilities.

All courses are conducted in English. English is widely used in Malaysia and it is not necessary in this case for faculty members to learn the national language. More important are cultural considerations. The program provides cross - cultural orientation for faculty members who have never worked in Southeast Asia.

E. Physical and Financial Resources to Support the Program

1. Proposed standard:

The home institution provides its course offerings in physical facilities that meet ... the facilities typical for quality higher education in the host country.

The program began in facilities designed to provide in - service technical training for Tenaga employees. It was the responsibility of IUPUI to specify what was required for the academic program and the responsibility of Tenaga to provide it. There have been instances of delays as the new institution grew, but in general the academic program has sufficient support facilities. Working overseas in a newly industrialized country, one can sometimes be misled into imagining that inefficiencies and logistic blunders never occur at U.S. universities. Experience of most faculty members teaches otherwise.

2. Proposed standard:

The home institution documents that its financial arrangements ... provide adequate and dependable support for the international course offerings.

As a state - supported institution, Indiana University, on behalf of IUPUI, must ensure that adequate financial resources are available to support credits offered overseas. The contract with the host institution provides detailed projections of actual costs and includes an indirect cost calculation supplied by the university's Office of Financial Management Support in consultation with the Office of Research and Sponsored Programs. The host institution makes payments in advance of expenditures in exchange for contracted services. The largest single expenditure is the cost of expatriate faculty who deliver the instructional program on site in Malaysia.

The resulting cost per student decreases as enrollments grow, with dramatic drops as enrollment reaches above 500 engineering students enrolled in a two - year program. However, with small enrollments, the cost per student may rise to the level of fees on the home campus itself.

## Cross Cultural Considerations

The standards proposed by the North Central Association of Colleges and Universities for overseas credit - bearing programs do not specifically address cross - cultural considerations. Although difficult to quantify, the authors hold the belief that the quality of cross - cultural communication is essential to success when U.S. universities seek to offer their credits in a foreign country. The Kohls<sup>[2]</sup> model of comparing cultures highlights some of the areas of potential misunderstanding if careful attention to cultural differences is lacking. Based on the authors' experiences in Malaysia, the contrasts proposed by Kohls may be paraphrased and placed in the context of operating a U.S. university in cooperation with a Malaysian institute of higher learning:

MORE TYPICAL OF USA	MORE TYPICAL OF MALAYSIA	COMPROMISE POSITIONS
Greater emphasis on egalitarian approach to administrative procedures and faculty governance.	Greater emphasis on hierarchical approach to administrative procedures and faculty governance.	Working hours — faculty members' prerogatives to schedule their own time; departmental exams; participation in decision making; flow of communication.
Greater emphasis on competition and individual rights.	Greater emphasis on cooperation and group well being.	Probation and dismissal policies; procedures to deal with academic and social misconduct; study habits.
Greater emphasis on informality.	Greater emphasis on formality.	How faculty members dress; classroom demeanor; expectations of students; forms of address; interaction with students outside the classroom; reactions of students as they adjust to life and study in the U.S.A.
Greater emphasis on openness and direct confrontation of issues.	Greater appreciation of subtlety in communication and the value of saving face.	Problem - solving strategies; tolerance for and response to inefficiencies in administrative procedures and colleagues' work habits.
Stronger desire to control time.	Greater willingness to alter schedules to fit changing circumstances and group needs.	Holiday schedules; time allotted for ritual and religious expression; students' attitudes toward deadlines and class hours; faculty members' prerogatives to schedule their own time.
Greater emphasis on achievement.	Greater emphasis on affiliation.	Choices between getting along well in the group and getting the job done; potential for interaction outside the work setting.

## Conclusion

The efforts of the Purdue School of Engineering and Technology at IUPUI to offer credit - bearing course work at the new Universiti Tenaga Nasional have been successful. The program offered by IUPUI gave the host institution time to recruit its own faculty and shape its own model of academic infrastructure from the procedures and templates established on site by IUPUI.

The quality of instruction on site is best measured by the performance of students who have already transferred to programs in the U.S.A. The data collected to date indicate that students do about the same quality of work in the U.S.A. as they did while enrolled in the IUPUI program in Malaysia. We take this as strong indication of equivalent quality.

Finally, the faculty members appointed by IUPUI have demonstrated admirable cross - cultural skills, and instances of serious cross - cultural misunderstanding have been remarkably few. Most of the faculty members who have been appointed to the program have had previous international experience, and the authors believe that this factor has promoted effective cross - cultural communication.

## Bibliography

<sup>[1]</sup> Dupree, John, and Lenn, Marjorie Peace, eds. 1997. A Voluntary Presentation of Standards for U.S. Institutions Offering Credit-Bearing Programs Abroad. In *Ambassadors of U.S. Higher Education: Quality Credit-Bearing Programs Abroad*. New York: College Entrance Examination Board, p. 89-93.

<sup>[2]</sup> Kohls, Robert L. June 1987. Models for comparing and contrasting cultures. Conference paper. Washington, D.C.: The National Association for Foreign Student Affairs, p. 10.

## Biographies

TIMOTHY DIEMER, has been involved in design & management of several international projects over the past 20 years, including refugee education projects in Thailand and American-degree preparatory programs in Malaysia. He is fluent in Thai language and has intermediate facility with Malay language.

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