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EDITORIAL

The desirability of 'sharing best practice', or of a (teaching) institution with some special strengths offering assistance to one which has particular needs - especially to one in a less-developed country - is obvious, and has often been discussed. One method which has frequently been mentioned as having been successful in various contexts is that of a Link: a medium-term, or better still a long-term connection between two departments. They do not always work, but when they do they can be very valuable indeed. The article in this issue describes the experiences of a particular department: that of the Department of Applied Statistics, at the University of Reading, UK.

REPORTS FROM ROUND THE WORLD

Links Between Universities - A view from the University of Reading.

by I. M. Wilson, University of Reading.

Many Universities were established in the emergent nations of a generation ago, often with help from abroad. For historical reasons Britain played a large part in many Commonwealth countries. That exciting era of creating new bodies has largely gone but some international assistance is still desired and needed to build up specific forms of expertise. Now smaller and cheaper operations are needed, usually within the existing structure of an institution which can produce a vigorous immune response to a transplant of an inappropriate foreign model. Why is statistics important in this process? As a subject in its own right statistics has to compete with other basic sciences for a place in the priority lists of developing countries' Universities. If it succeeds it is often because of the very wide application of statistical methods. Commonly less-developed countries, having relatively limited data, have great need of statistical techniques in the service of the disciplines primarily and immediately important to socio-economic development. One way of building up local expertise in statistics in a less-developed country is a Link with a relevant body in a developed country. This note is about links between University departments and what may make them workable and appropriate. It is based on Reading experience, particularly of our long-standing link with Colombo University, Sri Lanka.

The operation costs money - from the beneficiary country's own funds or from an aid agency whose criteria are likely to be even more rigidly development-oriented. Both academic teams need to take account of the development priorities of the state for otherwise political and financial support may dry up. They also need to look at how the pressures of operating a link will fit in with their own circumstances and attitudes. Enthusiastically making that effort to be useful and practical is a major requirement for a link to be successful. It means some inhibition of choice of, and of freedom to change,

academic direction. It also requires sustained effort over a substantial period of time, and good teamwork by the staff in both the partner departments.

Statistics is a subject which thrives on demands from user disciplines, and certainly as far as teaching is concerned it is not clear a priori that statistical education need be the worse for a conscious effort to mould it to perceived needs in the beneficiary country.

Any funding body is almost certainly concerned primarily with building up the beneficiary institution and only incidentally its individual members: if they are too self-seeking and not loyal there will be serious conflicts of interest and little scope for a link to succeed. Now it is clearly satisfying to developing-country students if their training equips them to tackle problems affecting the lives of their own people. It can be gratifying for the same sorts of reason to the statistician from a developed country helping this process along. He needs high moral motivation, which also quells chauvinism and helps in coping with the discomforts of travel. Unhappily this quality is not always found in combination with the receptiveness and sensitivity needed to cross cultural barriers, diagnose real needs in the recipient institution, and find effective answers. Rare indeed is the academic with these qualities in combination with patience, a friendly extrovert personality, enthusiasm for work, good physical health, and a real breadth of professional competence. From his work in a less-developed country this paragon would certainly get great intellectual stimulation, new pedagogic insights and at least broad new research directions.

The Reading-Colombo Applied Statistics Link has been manned by much more normal people and has nevertheless been rather successful. More statisticians and Departments of Statistics in developed countries should be encouraged to help in this sort of process. Our Link was recently described in Wilson et al. (1965). That article discusses, more fully than space permits here, the various possible means of delivering technical assistance, it describes in detail some component activities in our Colombo Link, the benefits to both partners, and some practical points about making the Link work. The Reading-Colombo Link has

involved more than 22 person-years of staff exchanges and is much the largest of our foreign associations. It grew from the secondment to Colombo of Dr. Stern from Reading funded by a now-defunct scheme whose basic aim was to supply stop-gap lecturers to Commonwealth universities. Put rather crudely, the agreed aim has been to build up in Colombo a Department on the same lines as ours at Reading. In equally simplistic terms one might say this is the result of the Link. Both Departments now teach BSc courses with strong statistical streams and a substantial emphasis on the use in applications of the material taught. Both teach MSc courses with applied orientations and large practical components. Both are outward-looking in the provision of consultancy services to other Departments of their own Universities, both teach short courses and undertake substantial amounts of paid work for outside clients as a means of improving their own facilities and working conditions, job attractiveness to staff, and staff experience.

The two Departments, their University hierarchies, and the funding agents - the British Council and the Overseas Development Administration (ODA) of the British Government - all regard this Link as very successful. Besides the dedicated work of the staff involved, one obvious reason why it works is the similarity between the two concerns, another the absence of any substantial statistical set-up in Colombo before the Link began and hence the lack of conflict with other vested interests. This is not to say that setting up the association, and the institution in Colombo, has been a simple task. Sri Lanka is a poor developing country with a rather highly-educated population who enjoy a good reputation around the world for their command of English and other skills. There is a substantial 'brain-drain' to richer countries exacerbated by communal problems. The University in Colombo does not have large budgets for equipment or books. Regulations set up to control sharp business practice in a nation with limited foreign exchange are very tough on the innocent transactions of the University. In this milieu the imagination, energy and zeal of Dr. Stern and Professor Samaranayake were of great importance in particular on the conception and birth of the Colombo Statistical Unit, and in getting it equipped with modern computing equipment.

These paragraphs do nothing to answer the three questions most commonly put by statisticians who would like to become involved in such international cooperation.

1. How do links start? Our Colombo Link is quite an unhelpful example, but another successful association which has been maintained for many years is with Ege University in Turkey. Three Turkish academics who had taken the Reading MSc in Biometry joined the staff of an Institute there and a small-scale Link was suggested. We knew each other well and it was obvious to both sides that we shared common interests, could get along together, and stood to benefit from cooperating. I fully endorse the view put to me by a wise Indonesian professor that a link is like a

marriage in these particulars. Polygamy seems more widely acceptable when the parties are institutions than individuals.

2. How do you get funding? In the Ege case funding was pieced together with contributions from IBM, Turkey and the Committee for International Cooperation in Higher Education of the British Council, as well as from Ege University. Funding was largely organised by the Turkish side. The Colombo Link idea was developed by Prof. Samaranayake and Dr. Stern when both were working in Colombo. There were early and close contacts with the local British Council Office in parallel with consulting Reading. Both sides contributed to a proposal which was then passed through Sri Lankan official channels to British Council. Officially, for

obvious reasons, the recipient must request the aid; practically speaking, both Universities and the funding agency must collaborate to establish a common understanding of what the project means.

3. What do you actually do? In the case of Colombo the long-term aim was to create a fully-functioning, self-sustaining, and properly-equipped Department. One matches inputs to the current work in Colombo and to current skills of the staff in post. Relatively early on, staff seconded from Reading had control of curriculum development, and undertook routine teaching, the training of counterpart trainers, and consultancy work. Staff based in Reading undertook external examining and provided some technical back-up, and these functions continue. Gradually visitors from Reading have done less teaching: research supervision and now research collaboration are still important. The expansion of Colombo's local role to be a centre of statistical and computing expertise for the Sri Lankan Research Institutes is also a continuing concern. The joint development by Reading and Colombo of a BBC microcomputer package for "serious" statistical work is one consequence of these concerns. Samaranayake and Abeyasekera (1985) report on this work in the Link context.

A visit to Colombo of six weeks or two months probably involves a Reading lecturer in contributing to a short course, offering new ideas to lecturers teaching regular University courses, helping with some consultancy problems, leading a visit to a Research Institute, reading some postgraduate dissertations or other examining duties, contributing to research supervision, counselling staff members who may study abroad especially in Reading, and liaising with British Council. Visitors always return with a "shopping list" varying from computer parts to a job specification for the next visitor, and very often with a commitment to supervise a Sri Lankan who will be seconded to Reading.

The extra commitments have to be fitted in, and so does purely organisational work. For example Dr. Stern's role (in Britain) has been crucial in securing computing equipment donations from ODA. A weak general statement that something should be presented would have been ineffectual. A carefully costed and lucidly reasoned case is needed. Persistent pressure, forceful advocacy, and attention to detail are important. Where academics have often been weak is in following through initiatives. None of us wants to spend time helping computing retailers to get their bills of lading filled in properly, but such things may be necessary.

More recently, possible associations overseas have led us to consider working with bodies less similar to our own Department, for example medical faculty departments where existing staff have first degrees in medicine and some further qualifications in epidemiology or demography. The normal method of strengthening statistics in such a team in a developed country is probably to recruit one or two statisticians and to help them to specialise in the necessary directions, but this may well not be a feasible solution in many

places and the question arises how to upgrade the statistical capabilities of the staff already in post. But this is another issue for another occasion!

References

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