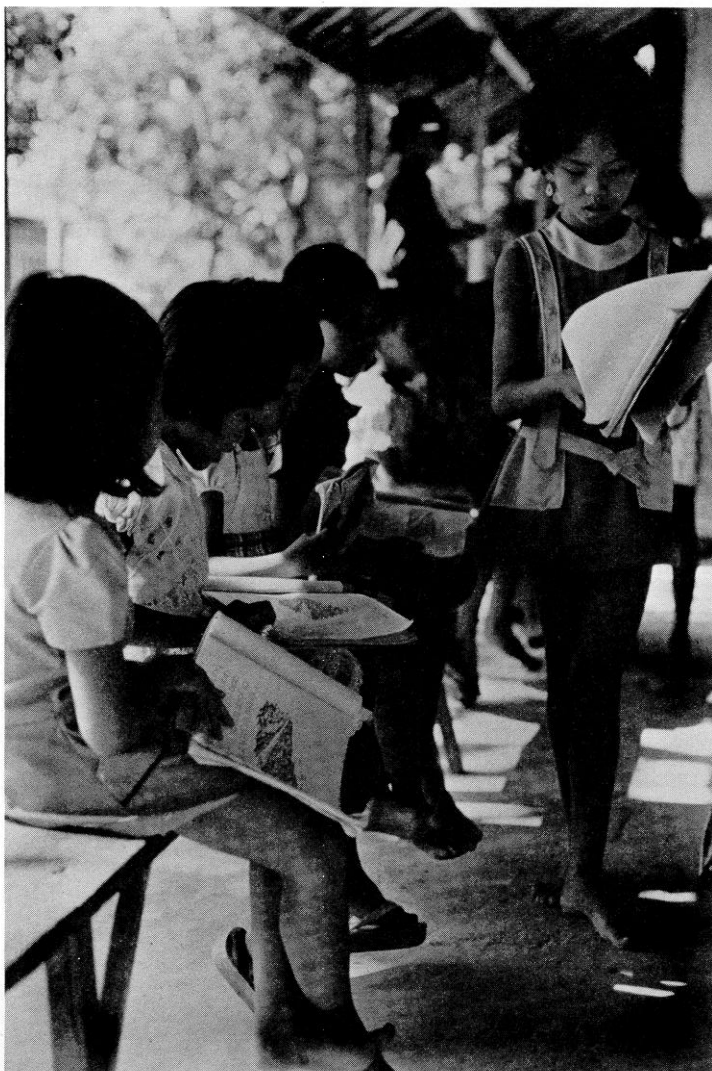


Less schooling, more learning



In the first hour of learning at Kebac 3, the programmed teachers from the higher primary levels take the younger students through a lesson of reading and comprehension in Bahasa Indonesia (the national language).

Article and photos by
Clyde Sanger

Of all peoples the Filipinos are fondest of inscribing exhortations on stone and setting them up in public places. Especially exhortations to youth, and to work.

Just inside the gates of Cebu State College, where the neatly dressed children crowd in early morning before classes, is a sitting statue of the poet, patriot and surgeon José Rizal, and on the plinth are cut his words to Filipino youth:

*"Hold high thy brow serene,
O youth, where now you stand;
Let the bright sheen
Of your grace be seen,
Fair hope of my fatherland!"*

And on arrival at the primary school in Naalad, the first of the five barrios up the valley in Naga district where the Project Impact experiment has now been under way for three years, there on the wall are pinned the sharp, clear words of Benjamin Franklin:

"Industry: Lose no time; be employed in something useful; cut off all unnecessary actions."

Well, well. It's one thing to preach, another to practice. In the 80 years since Rizal died before a Spanish firing squad, the youth of his fatherland have multiplied four or six times over, and conditions in many parts do not encourage serenity. There is work enough to do, especially in rural areas like Naga where you may grow three crops of corn or rice a year in the valley, and where there is tobacco or ipil-ipil trees to tend on the terraced hills. But there's often a conflict for young people between work in the soil and attendance at school. If they had to decide which were the "unnecessary actions" they should cut off, these were usually school classes. Helping the family to harvest or plant or keep house was not just something useful; it was survival. In the Naga schools, like nearly anywhere else in the Philippines, about half the primary school age children have "dropped out" before reaching Grade 4 because of irregular attendance.

Not that the present school system could handle much larger numbers. It is said that about 85 percent of the recurrent budget for education goes to

pay the salaries of the country's 400,000 teachers and, with 12 million pupils now enrolled in primary and secondary schools, that gives a teacher: student ratio of 30:1. They would be exceedingly crowded classrooms if student numbers increased, and there is not money for more teachers. What will happen in the year 2000, when the country's school-age population has doubled again?

The same question faces other countries in Southeast Asia. In Indonesia in 1972 there were 13 million children enrolled in primary schools, and no places for another 7 million of the same age group. A big effort in primary school construction has partially closed the gap since then, but by 1979 there will be 24 million children in the 7 to 12 age group. How can one train and pay for all the extra teachers?

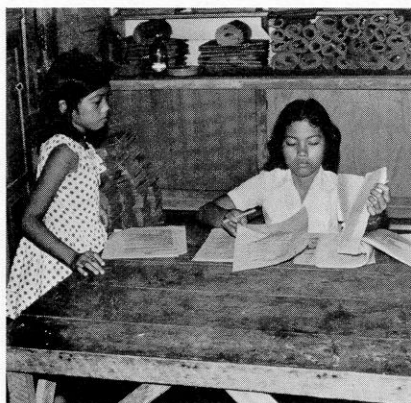
This was the sort of question that the Southeast Asian Ministers of Education Organization pondered in the early 1970s. SEAMEO turned in 1972 to one of its regional centres, INNOTECH, the Regional Centre for Educational Innovation and Technology, with a request to do detailed research on "The Development of an Effective and Economical Delivery System for Mass Primary Education". What the education ministers wanted was an alternative to the present costly and (in terms of excluding out-of-school youth) rigid system; yet an alternative that could grow up alongside the present school system, as a supplement to it rather than a total replacement. As Dr Santoso Hamijoyo, director-general of primary and secondary education in Indonesia, has said: the present school system with all its pitfalls has taken root for decades, and it would be "unwise and technically impossible, and perhaps also socially unacceptable, to change this overnight."

The emphasis, then, was on finding ways to introduce as much flexibility as possible into the learning process and to maintain quality while making primary education available to almost everyone. Also to keep within the bounds of limited national budgets. It was a tall order. How do you set out to achieve better learning results for a larger number of students at a greatly reduced cost per student?

INNOTECH's answer was to suggest a system that drew on all the resources of the community. That is why the research was named Project Impact, standing for Instruction Managed by Parents, Community and Teachers. Proyek Pamong is the Indonesian equivalent. Yet it was not only parents and community leaders and skilled craftsmen who were to back up the teachers, but the older students as well who should play the role of tutors and thus allow the professional teachers to spread their energy and time among many more pupils. Also the children should do as much learning as possible

by themselves, singly or in peer groups. Which is the reason for a big effort in rewriting the entire school syllabus in "modularized" form, so that a student can use these booklets as building blocks and go through the year's curriculum in his own time and at his own pace.

Finally, the INNOTECH planners argued that the research, at any rate in the first phase, should be done in rural districts, among a cluster of villages. This was for the good reason that the vast majority of people in Southeast Asia still live in rural areas. Also, I suspect, they thought there would be more community support in long-



Self-reliance among the young: Lucita, the youngest instructional aide at Naalad, marks a post-test that Minie Abangan has just done by herself on completing a module. By correcting all the post-tests, Lucita frees a teacher/IS for other work.

settled villages than in the more restless areas of mushrooming cities.

With strong support from the Indonesian and Philippines governments, a search was made for suitable rural areas. The people of Kebakkramat district, 15 km east of Solo in central Java, and of Naga district, 20 km south of Cebu city in central Philippines, responded positively to an acceptance campaign when the experiment was outlined to them towards the end of 1973. IDRC supported the project with a grant to INNOTECH.

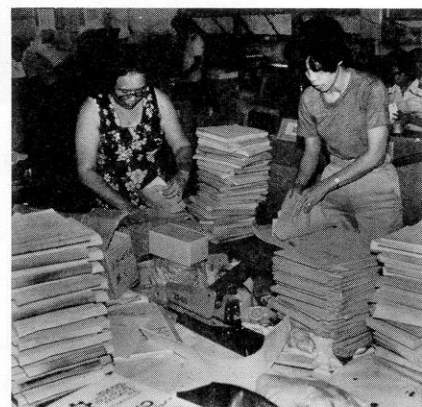
The mood was one of adventure. Dr Liceria Soriano, now director of INNOTECH but who was then Director of Public Schools in the Philippines, went to Cebu and ended a speech of advice and encouragement by quoting the words of André Gide: "One cannot discover new oceans unless he has the courage to lose sight of the shores." An apt metaphor to use in a city near where Ferdinand Magellan ended his days.

How has Project Impact's voyage of exploration fared in these three years? Well, there have been stormy times, and equally some periods of being becalmed. But enough progress has been achieved to make talk of "new oceans" more than a brave rallying-call. Dr Soriano says today: "I feel very

much encouraged to go on with the project. Many of the obstacles that were met at the beginning are now overcome. There are a few more difficulties that we must solve, but I know that our experiences in the first phase of the project will help us to do better in the second phase."

The module-writers both in Cebu and in Solo (where they are known as subject specialists) have laid the foundations for this progress. It has been unremitting work, turning the seven or eight subjects in the curriculum for Grades 4 to 6 into easy-to-read booklets, each of which takes an average student two to four hours to master. The tendency at first was to write too many booklets but, by eliminating repetitive matter, the Cebu team has kept each subject inside 25 modules for the year's curriculum, plus five review modules. Nevertheless, that means at least 210 booklets, each complete with readiness tests and post-tests, for a pupil to work through in a year. No wonder that in large letters on the outside wall of the Naga schools is written the admonition of Dr Narciso Albarracin, who is both Under Secretary for Education and chairman of the national steering committee for Project Impact: "The core of our school curriculum is work!"

Whether it is the influence of Dr Albarracin or Benjamin Franklin, work they certainly do. A visitor is always impressed to see how intently the children are studying their modules, unsupervised for the most part. In the Naga barrios they are clustered under the shady "learning kiosks" built by the community; in the Indonesian villages they more usually sit on the cool stone against the outside wall of the school building. The schools themselves have been transformed, by removing inside walls and adding lines of bookshelves, into Community Learning Centres. The physical changes are striking, but it will take longer for attitudes to alter so that all the people in the village think of it as their place, rather than as a school.



To keep pace with the pupils' demand for more modules, the production unit at Cebu College has to be full of fast workers with nimble fingers. Collating by hand is a heavy task here.



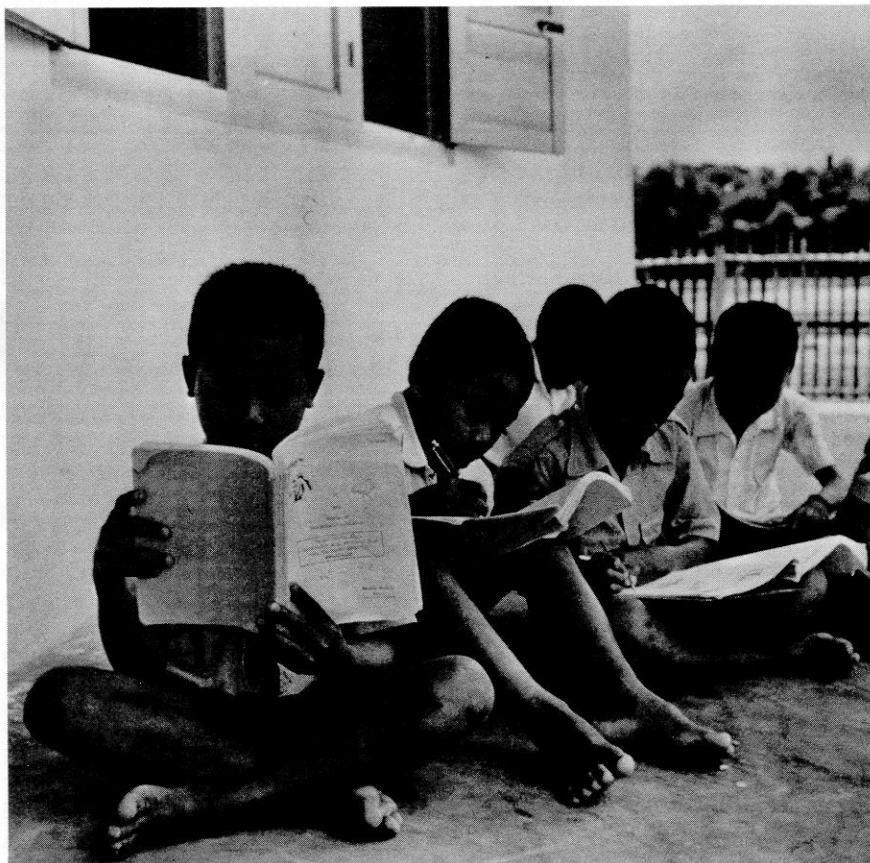
Dr. Soriano, director of INNOTECH: Many of the obstacles that were met at the beginning are now overcome.

The greatest change, perhaps, has happened to the teacher. Classroom teacher no longer, in fact, but Instructional Supervisor organizing the non-professional assistants, whether high school students doing (as in the Philippines) one full day's tutoring a month or (as in Indonesia) home tutoring in the evening at a neighbour's house. The IS also has the job of training the older primary students (Grades 4 to 6) in a programmed manner so that they can, the next day, pass on a lesson in reading, writing, comprehension or mathematics to children of the first three grades.

There are, in Dr Soriano's words, "a few more difficulties that we must solve." One of them is the problem of strengthening this programmed teaching in the lower grades, perhaps through a professional teacher (not one, however, who's been retrained as an IS) working to give them a sound basis in a second language so that by Level 4 they can learn rapidly on their own. Both Naga and Solo were chosen because the mother-tongue (Cebuano and Javanese) is different from the language of instruction in the later grades, and INNOTECH wanted to devise a system that would include an effective approach to this common problem of transition between languages.

The results of tests, made to compare the work of Impact students with those in non-Impact schools, show that the former with few exceptions have scored higher marks. Rosetta Mante and Boorham Respati, the two project directors, will hasten to add that these tests are still preliminary; but it is encouraging that the Impact/Pamong students are even now scoring at least 6 percent higher marks than their contemporaries.

The project has also had some success with those who would normally be called out-of-school youth, both by keeping in this more flexible system those who would have by now dropped out of school through irregular attendance, and by drawing back those who years ago left primary school without



Peer group learning at Alastuwo centre is done mainly in the cool of the verandah outside the school, while the building itself is now mostly used for library and administrative purposes.

graduating. I think of Exequiel Sobramonte, who had to be absent for a month on family duties (his parents were visiting another island) but who caught up on their return by speeding through 17 modules in one week; and also of Sukiyo and Sugiman, two grown men who came back to a village "learning post" and completed primary graduation to qualify for promotion in local government.

As for cost-effectiveness, the operating costs are likely to be significantly lower for a CLC than for the school it used to be. A Naga school with 10 teachers has been turned into a CLC run with only two instructional supervisors, a rural coordinator and an aide.

Even if a professional teacher is added, to work with the lower grades, and even if module production turns out to be marginally more expensive than textbooks (and it may not be — the unit costs during the research stage were bound to be higher than with a large printing), the Impact system will still be more economical than the traditional school in costs per student.

More figures on the learning- and cost-effectiveness will be available as Project Impact moves this year into its second phase. This involves trying out the system at two "replication" sites in the Philippines — in the nearby town of Lapu-lapu and at Sapang Palay near Manila, where Tagalog not Cebuano is the basic language. It also involves

bringing the experiment at Naga and Solo full circle by 1979, when every grade (or level) of primary student will have been affected by the system.

Every day, as they come to work at Cebu State College, the module-writers for Naga pass by Rizal's statue. They are not accustomed to holding their heads high, in the poet's phrase; most of the day they are bent busily over their books. But I trust they straighten up with a feeling of satisfaction now and then. Together with the ISS, who have adapted so well to their new role, and the 2000 or so students in Naga and Solo who have taken enthusiastically to the experiment, they are proving to be a "fair hope" for Southeast Asia. □

Clyde Sanger is the author of a booklet, soon to be published by the IDRC, which describes the origins and development of Project Impact, a new approach to mass primary education in Indonesia and the Philippines. A journalist and author, Mr. Sanger is an associate director in the IDRC's Publications Division. He visited several of the rural schools participating in Project Impact early in 1975, and again at the end of last year.