"DC-OS": Decentralized, On-Site Training; A Sadly Neglected Option for Building the Pacific Islands Health Workforce

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Over the past half-century, Pacific Island jurisdictions have mostly resorted to one of three strategies for obtaining the health workers needed to run health services. Each of these strategies has serious disadvantages.

First, most jurisdictions rely on campus-based college programs to supply health workers. While programs have produced a steady supply of excellent health workers, the supply has fallen far short of regional needs. The geography of the Pacific, with relatively small, widely scattered populations, makes travel and communication difficult and expensive. Sending students abroad is too costly to allow the training of the large number of needed health workers in the region. Even if they could afford to do so, health services with large numbers of under-trained health workers could not send most away for training, because there would be too few left to do the work. Family, community, social and emotional support is vital to most young people in the Pacific. Travel to a distant college results in the loss of social and emotional support for many students, resulting in high dropout and failure rates. Underdeveloped primary and secondary educational infrastructure in much of the region compounds this problem by leaving many students academically unprepared for more rigorous college programs. Students have limited opportunity to master course material. By the end of the semester, if they have not grasped the material, they will fail their courses and be "weeded out." Many of these students might learn the material if given more personalized attention and flexibility in time needed to succeed. By the end of their training, the students who do succeed have been away from their homes for years, and often do not return.

The second strategy is to train health workers on the job. These training activities typically consist of a series of lectures provided by various members of the district health service staff, supplemented by clinical attachments with senior health staff in the same discipline for which the student is being prepared. Following "certification," attempts are made to bolster this training with miscellaneous workshops as they come along. Usually, in this style of training, there are no clearly defined learning objectives, little accountability for learning on the part of either teachers or students, and no assurance of competency for procedural skills. The result is health workers that have serious gaps in knowledge and skills maybe prone to errors of judgment and practice, adding to the disorganization within the health service by their inability to work effectively with their colleagues in other health disciplines.

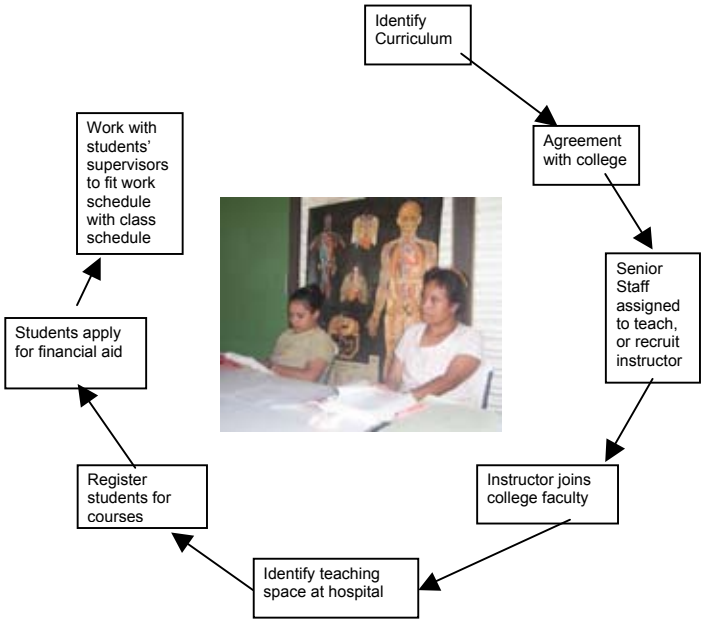
The third strategy is the importation of expatriate health workers. This strategy is also very costly. It deprives health service clients of workers who speak their language and fully understand their cultural background. It deprives the host jurisdiction of the opportunity to develop leadership from the ranks of the health workforce and handicaps the jurisdiction of origin of needed human capital.

There is a promising alternative to these three strategies. Please allow us to introduce a new acronym into the

language of health training in the Pacific: DC-OS. DC-OS stands for decentralized (satellite programs away from the main campus of the sponsoring college), on-site (delivery within the health worksite) of formal college health worker training programs. While the concept is not new, it is underappreciated and underutilized. It has many advantages and addresses many of the problems which prevent more conventional strategies from succeeding in the region.

The central idea of DC-OS is to bring the college to the health worksite (e.g., to the district hospital), rather than sending the health workers to the college. This is done by identifying a college in the region that already has a high-quality, appropriate curriculum for training the type(s) of health worker needed by the health service, then a formal agreement is established with the college to allow the worksite to become a satellite site for delivery of the program (Figure 1).

Figure 1: Creating a DC-OS Program



Faculty can either come from the host college or be recruited from the senior ranks of the health service (and be credentialed as faculty for the sponsoring college). Faculty from the health service can often continue to perform many of their usual functions in addition to teaching. Since they use the pre-made course plans, syllabi and other course materials from the college, instructors are spared the difficult work of creating training programs themselves. Classroom space is provided and equipped by the health service. In addition to qualifying the instructors, the sponsoring college sets and assures quality standards for instruction and evaluation, registers students and assists with financial aid applications. In effect, the college supplies ready-made educational planning and accountability to the health service. The health service loans library and computer facilities and clinical equipment to be used by the students and faculty.

Students are recruited both from the health service and from the community. Those who are already employed by the health service are required to attend class as part of their workday schedule, but also continue to function in their jobs. Since accredited college programs are being delivered students are often eligible for financial aid programs which can help to support the costs of training.

Because they are on-site, DC-OS programs can be more easily tailored to the prevalent conditions in the local health service. Being on-site, real-life examples related to instruction are immediately at hand and it is possible to take advantage of the numerous "teachable moments" that arise at the site.

Teaching schedules can be adjusted to both the workload of the health service and to the progress of the students, as long as college requirements such as minimal teaching contact hours are kept. For example, during an epidemic the teaching schedule can be delayed or if there is a class that many of the students are failing, the class can be extended so students can meet the learning objectives and successfully complete the course. Work supervisors can closely follow the progress of students. They can carve out more study time from the workday for students who are having trouble with a course or arrange for extra tutoring to avoid failure. Since students do not have to travel long distances from their homes to attend school, they continue to enjoy family and social support while in school and there is much less risk of being lost to their home jurisdiction by moving away.

DC-OS is much less costly than campus-based training, especially when the campus is out of the jurisdiction of the health service. By saving on the costs of travel and off-island housing by: keeping students on the job while they are taking classes; using the resources of the health service (including instructors); and minimizing attrition, the health service can afford to train many more students at one time.

There are several caveats for DC-OS. Senior health staff that become instructors must adapt to a new role. Some orientation to this role, to the requirements of the

college, and some mentoring by experienced faculty are helpful. The logistics of DC-OS can be challenging. Foresight and frequent follow-up is needed to assure that; course texts and materials are available, students are registered on time, and required documentation (class rosters, examination forms, test results, course grades, and instructor evaluations) are submitted properly. Fitting work with class schedules can be challenging, especially when health workers who work all shifts (e.g. clinical nurses) are being trained. Care is needed to guard against a nurse being scheduled for an all-night ward shift followed by 3 hours of class.

Worksite policies, procedures and quality standards must be clearly defined for the hands-on components of DC-OS training to be effective. Students cannot learn excellent practice in a disorganized worksite with poor or non-existent standards. A functioning quality assurance system including a system for regular quality audits and corrective plans should be considered a prerequisite for DC-OS programs.

DC-OS requires a strong commitment and partnership between the sponsoring college and the host institution. The host institution must adhere strictly to teaching standards such as instructor qualifications, prescribed teaching contact hours, course learning objectives and evaluation requirements. Failure to do so compromises not just the quality of the student experience, but also may jeopardize the reputation and accreditation of the college. For its part, DC-OS requires college administrators to reach beyond the comfortable limits of their campuses to assure appropriate delivery of courses at distant sites. Off-site students are out of site, but must not be out of mind. Staff should be deployed to the site to register students and observe classes in session. Colleges should strive to be flexible with regard to class scheduling, as long as educational standards are not compromised, recognizing that in the context of the worksite classes may need to start before or end later than the standard campus semester schedule. It is also desirable for program curricula to be structured with a minimum of sequential pre-requisites. A student taking an educational program on a college campus can be ill or called away to a funeral and reschedule the class to the following year, then proceed with the class below through the rest of the curriculum. In contrast, DC-OS programs typically have very few instructors which can be limiting since the program must proceed from course to course over time (with the instructors teaching a new course each semester without backtracking. If students who miss or fail a course are deemed ineligible to take the following courses the program will become pyramidal, with fewer and fewer students remaining as time goes on.

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DC-OS programs bring a flood of new ideas and a culture of learning into the health service. Students who are learning the proper way to perform tasks challenge more senior staff to explain why they may not be following the same procedures. This can have a powerful, rejuvenating effect. With DC-OS it is possible to train entire cohorts of semi-skilled health staff and thus to take a huge stride toward a professionalized, high performance health service.