DOCUMENT RESUME

ED 339 792 CE 049 517

AUTHOR Van Steenwyk, Ned
TITLE Trade Certification and Job Placement Program in Honduras: A Pilot Project.
INSTITUTION Agency for International Development (IDCA), Washington, DC.
PUB DATE 8 Dec 87
NOTE 16p.; Paper presented at the Meeting of the American Vocational Association (Las Vegas, NV, December 6-10, 1987).
PUB TYPE Reports - Descriptive (141) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Adult Vocational Education; *Competency Based Education; Developing Nations; Dropout Prevention; Educational Certificates; Educational Needs; Foreign Countries; Job Placement; Job Training; *Labor Force Development; National Programs; *Program Development; Program Effectiveness; *Program Improvement; Relevance (Education); *Trade and Industrial Education; Training Methods
IDENTIFIERS *Honduras

ABSTRACT

As is the case in many developing countries, Honduras's vocational training and job placement systems were plagued by high dropout and low job placement rates. After deciding that the issue of relevance was the key to improving the country's job training system, a trade advisory committee set about to develop a series of competency-based instructional modules and certification exams that are now being used at four of the country's vocational training institutions (public and private). Students receive self-paced, industry-specific job training, certification, and job placement assistance. The early results of the Honduran system have been most encouraging. Dropout rates have been reduced from 40 or 50 percent to between 5 and 15 percent. The combined trade certification and job placement program has made it possible to establish a quality control mechanism that provides immediate feedback on the relevance and quality of the training being provided. The program's improved completion and placement rates have reduced overall training costs substantially. Because of its early success, the program is being expanded to train, certify, and find employment for 15,000 youths and adults over the course of the next 5 years. (MN)

PRESENTATION AT THE 1987 AMERICAN VOCATIONAL ASSOCIATION CONVENTION, INTERNATIONAL SECTION, "AREAS OF EXCELLENCE: PROGRAMS, MANAGEMENT AND SUPPORT"

DECEMBER 8, 1987

NED VAN STEENWYK
AID/HONDURAS
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523-3480

NOTE: FURTHER INFORMATION ON THE TRAINING PROJECT DESCRIBED IN THIS PRESENTATION CAN BE OBTAINED FROM:

THE HONDURAN COUNCIL FOR HUMAN RESOURCES DEVELOPMENT
APARTADO POSTAL NO. 1599
TEGUCIGALPA, HONDURAS
AMERICA CENTRAL

Traditionally A.I.D. and other international donor institutions have not been exceptionally innovative in vocational education. Emphasis has been on bricks and morter, some technical assistance in general vocational education and administration, tools and equipment. That has pretty much been the standard vocational education project in developing nations. And the reason is simple ----

these are safe projects --- they do not require long-term commitments, and one does not have to deal with anything new or different which increases risks a d the probability of difficulties in project implementation--

you provide the funding, build a building, equip the shops and provide some training materials and general technical assistance and then leave. And if anyone wonders what you did -- there is the building and the equipment to confirm that you were there and that development assistance was provided.

But -- those who have worked in developing nations are aware that the problem is not just a lack of facilities -- in fact, even in Honduras which is the poorest nation in Central America, we can show you some model vocational training facilities which compare favorably with many facilities in the U.S.

The problems with these centers are related to maintaining these turn key operations, and low quality and irrelevant instruction which results in high dropout rates, low job placement rates, and instructional costs based on graduates who practice their trades which are often higher than those in the U.S., even though instructors' salaries are 80 to 90% lower in Honduras.

This means that the initial calculations of participant hour of instruction costs may be $1.50 per hour, but it is increased to $3 an hour based on a 50% dropout rate, and $6 an hour because only half of the graduates practice their trades.

In the case of Honduras, the most vocal critics of the training system were the private and labor sectors, and these were also the sectors which could benefit most from improved vocational training services. As a consequence, a private and labor sector advisory committee was formed in 1982 to help A.I.D. identify options, and during the next two years four major studies were conducted on vocational training needs and resources, focussing on both the supply and the demand for vocational training.

These studies and the work of the advisory committee did not really reveal anything particularly different in regards to the problems or needs of vocational training in a developing country. But the process was extremely important for identifying the resources, alternatives and opportunities available for improving the quality and relevance of training. Probably even more important, it built a consensus, and gave training institutions the opportunity to express their views on the problem as well -- a problem which included a lack of communication and colloration from the private and labor sectors.

What emerged was an integrated approach for improving the quality, relevancy and cost-effectiveness of training.

Relevancy was the key issue. The consensus was that unless training could be made more relevant, participants would not be able to practice their trades or obtain employment, and there could be no justification for investing in vocational training.

Consequently, in 1984 a pilot project was funded by A.I.D. The first thing we had to deal with was improving the relevancy, and then the quality of training. And demonstrate that it could be done in a cost-effective manner.

Again, the private and labor sectors were the primary critics of training, noting that graduates of training programs could not perform at productive levels and many were unemployed.

So trade advisory committees were formed to identify the specific competencies and tasks which were required of a competent worker, and would assure the employment of the person, in three basic trades (welding, precision mechanics, and wood working).

Based on these competencies -- certification exams and competency based instruction modules were developed. Some facility upgrading and equiping of training centers was also done to assure that training centers would have the facilities and equipment required;

but the major thrust was, and is, in the areas of trade certification, curriculum development and improving instructional strategies -- areas which have only received secondary attention traditionally.

This year four vocational training institutions (public and private) began using CBI training modules and the early results are now in for the two centers which used these modules during the entire school year. Annual dropout rates were reduced from between 40-50% to 15% in one of the private training centers and from about 40% in the national skills training institute (INFOP) to 5%, for a 95% retention rate ---- and students are reaching significantly higher levels of competency in their trades.

Students are progressing at their own rates, they don't move on to the next competency or task until they show 100% mastery of the performance objective for the task, and over-all, students are being trained in a shorter period of time and at lower costs than through traditional training strategies.

Young people and adults who have some experience in the trade are challenging modules and moving quickly on to the areas where they need help --- and, an open entry-open exit approach has also

been shown to be workable, and allows training centers to use their facilities and resources in a more cost-effective manner.

Based on these results, the project was expanded this year to cover ten additional trade areas, respond to industry specific training needs using CBI and certification, and to work with a minimum of 20 vocational training centers. The project purpose remains, to improve the quality, relevance, and cost effectiveness of training but the new project goals are much more ambitious. The project will:

-Train, certify, increase the productivity and find employment for a total of 15,000 young people and adults over the next five years;

-Reduce dropout rates to 20% and increase job placement rates to at least 80%. This will be done using:

1) a national trade certification system controlled and run by the private and labor sectors to assure that graduates of training centers have reached acceptable levels of competency;

2) CBI for assuring that participants will be able to meet certification standards;

3) integrating production with instruction for recovering 50% of the total training costs in private training centers and 100% of the shop materials, equipment maintenance and replacement costs in public training centers.

4) a national job placement center (also run by the private and labor sectors) for matching job opportunities with those who are seeking employment.

The project is ambitious, but the pilot activities we conducted from 1984 to 1987 have demonstrated that one can improve the relevancy, quality and cost-effectiveness of training at a reasonable cost. And we learned alot through the process..... that experience may be what is most important for passing on to others who may be considering similar strategies for improving the quality, relevance and cost-effectiveness of training. There are 9 possible problem areas.

1) CB curriculum development is not cheap or quickly done. The initial identification of competencies and tasks with advisory committees, preparation of certification standards and exams, and then the development of CBI modules and training materials takes at least one year, another year to field test the materials, and only in the third year will the materials be available for wider distribution. And you will only be able to do that after you have a sufficient number of local people trained for this work.

And that's only the beginning, you can't implement the system by decree -- you have to show instructors and administrators that it will work and motivate people for the extra effort it takes on the part of instructors and supervisors.

This requires a long-term commitment and without this commitment. or committed local personnel, or sufficient funding it should not be attempted.

2) Alot of people talk about CBI. Many of the problems we had were related to the fact that CBI, even in the U.S., is not that well defined in practice.

Many states and training institutions are doing what they call CBI -- but objectives are not defined in measureable terms, many still give percentage grades and, if we apply this system in

Honduras, most students will never master the competencies at the level required for obtaining employment.

If you rely on technical assistance for most of your guidance you may have three or four experienced educators, each with an impressive background..... all providing different advice.

This means that project managers and personnel must be prepared to monitor all project outputs, step in and do alot of the work that other people should be doing when problems arise, you will have to be prepared to make difficult decisions on personnel, and it is advisable to define in very clear terms what your standards and procedures in certification and curriculum will be -- before you begin contracting local personnel and technical assistance.

But if you are not prepared for these things and don't respond when needed, you won't have the relevant, quality training materials you require and will rapidly use up your project's resources, and discredit one of the best systems available for improving the quality and relevance of training.

3) Trade certification: Trade certification is also something relatively new in the U.S. and while many states and institutions are certifying people, or issuing certificates and calling it certification, many certification exams do not include tests of productivity. Many certification systems are also evaluating people on a percentage basis, and not the mastery of critical competencies for obtaining employment. Further, many of the certification exams are norm based (based on average student achievement over past years), rather than being directly linked to the competencies required for obtaining employment.

You may also have problems with technical assistance and educators who will want to write the certification exams based on CBI training modules. Theoretically, there should be no problem with this strategy if your training modules are based on your previously defined competencies, tasks and performance objectives.

But what happens in practice is that certification exams too often will be based on irrelevant details from training materials and will not be referenced to the minimum performance levels required for employment. This causes two problems:

1st, It will disqualify workers who have not had been exposed to your CBI modules. But having this certification system available to workers, and not just training center graduates, is extremely important for the labor sector's acceptance of the system and to provide an important opportunity for the upward mobility of qualified, competent workers and tradespeople who do not learn their trade in training centers. It is also important for allowing and determining where and how these same people can drop into the system for upgrading their skills and getting the specific, additional training they need for increasing their productivity and obtaining higher salaries.

2nd, if your certification exam does not measure the explicit levels of performance as defined by employers and supervisors, you won't even have a valid test for training center graduates because the exam will not be measuring the performance and productivity levels required for obtaining employment -- thereby creating higher levels of frustration and alienation in society, because your graduates will not be able to obtain employment.

In order to avoid these problems, our experience has shown that certification exams must be developed first, on the basis of the original competencies, tasks and performance objectives identified and defined by employers, supervisors and workers. Then, and only then, should work begin in curriculum development, again, on the basis of these same competencies, tasks, performance objectives, and the trade certification exams. In other words, we are teaching for the test. And we don't feel that there is anything wrong with this because this is what gets people jobs and makes people more productive.

This has been difficult for many people to grasp, probably because most educators are accustomed to writing curricula before developing exams, but the exams must come first. If you do it backwards or mix it up, you will find yourself in a never ending circle of adjusting one thing to another - and your students will suffer the consequences of not having the specific skills required for employment.

4) Initially we did not think that we should place too much emphasis on affective or entreprenuerial skills because of possible problems we might have with the Ministry of Labor and training institutions, for establishing standards in these areas. But we are now in the process of dealing with this need as well, recognizing that we may still encounter difficulties with the Ministry of Labor and training institutions, but also recognizing that these employability skills are too important to leave out of a CBI system.

5) Trade advisory committees: We are using the DACUM system with trade advisory committees. This is the fastest way we have found to define training needs, competencies, tasks and performance objectives. None-the-less, be sure that these things

are validated using skilled workers; and provide appropriate resources for defining training needs based on a wider sample of employers and with follow-up evaluations of your graduates, to assure that your system is actually meeting private sector needs.

6) CBI curricula often focus so closely on a specific task and its mastery that we lose sight of a person's learning needs and his/her desire to see some finished product evolving out of the learning process, something useful that one can say "I made that, I'm learning and here's the proof.

That need is universal, but there are also the economic needs of participants and training institutions in developing countries, and these needs must also be met; but few U.S. or European training programs address this need.

But you can meet these needs through integrating production with instruction. You will also help fill the artificial vacuum between education and the real world. In Honduras we have vocational training institutions which are recuperating up to 100% of their costs. I have personally directed institutions which have recovered about 90% of their recurrent costs and Paul Packer from Northeast Iowa Technical Institute who is here today has also worked in these institutions and had excellent results integrating production with instruction here in the U.S.

But, our overall project goal is to assure that centers reach 50% cost recovery and to institutionalize the integration of production with instruction under a national model, with assistance in developing new products, marketing, and a production loan fund.

This makes curriciculum development even more challenging -- but you have to maintain your training system if you want to provide high quality and relevant instruction for assuring that people will be able to obtain employment. You have to be prepared to deal with the recurrent costs of training and the limited resources that training centers have for assuring higher quality and more relevant instruction.

7) Job Placement: Unfortunately, most job placement services are not very efficient in developing countries. If your nation does not have an efficient system you must also be prepared to work in this area.

8) Capital Investments: Although CBI, certification, integrating production with instruction, and job placement services will make training centers more cost-effective, thereby allowing your training system to accept more participants with reduced recurrent costs; invariably you will discover deficiencies in equipment, physical facilities and multi-media capabilities. These investments must also be funded and must be considered in your project design.

9) Private and Labor Sector Involvement, with some measure of direct control over activities, can be difficult to establish and can cause difficulties with the public sector and training institutions which are not accustomed to this type of involvement. But if you do not have this involvement it will be very difficult to establish mechanisms for assuring that your graduates are actually meeting private sector needs and will possess the specific skills required for obtaining employment.

Fortunately, our pilot project gave us the time to consider many of these needs as we went along, so that when we began working on the new project design last year, we were able to incorporate activities and guidelines to assure that we could avoid many of the problems in these nine areas.

1) Establishing a long term committment
2) Defining the CBI strategy and curriculum development standards
3) Defining the trade certification strategy and guidelines
4) Attending to affective and entrepreneurial skills
5) Validating competencies, modules, exams and providing mechanisms for student follow-up.
6) Integrating production with instruction
7) Assuring appropriate resources for capital investments
8) Assuring appropriate job placement mechanisms
9) Assuring continued private and labor sector involvement

Undoubtedly, these potential problem areas and the long-term commitment required for implementing a system like this will cause some people to to say that this is a can of worms that I would sooner not open .....but,

consider the early results of the use of the system in Honduras:

(1) Dropout rates are being reduced from rates of 40 to 50%; to 5 to 15% which, in turn, is reducing participant hour of training costs by 35 to 40%, based on the number of people who complete their training. In more concrete terms, this means that a nation's training system can also increase the number of people who will receive training by about 60 to 70% without any appreciable increase in recurrent costs (See calculations in Appendix).

(2) Through using trade certification and a job placement service, you can also establish a quality control mechanism, with immediate feedback on the relevance and quality of training being provided; for assuring that people meet the standards required for obtaining employment and will be placed. By achieving just an 80% job placement rate, as compared to 50% to 60% job placement rates, can reduce your training costs, based on the number of people who complete their training and practice their trades, by about 110% to over 150% (See calculations in Appendix).

3) Recovering 50% of your recurrent costs through integrating production with instruction can be realized. This too provides an important new source of income for training programs which have had difficulty covering their materials, maintenance and equipment replacement costs (See Appendix).

These savings, and the opportunity to double or triple the number of people who receive training and practice their trades, with minimal changes in recurrent training costs, is extremely important for developing nations.

In conclusion, my own experience over 16 years in Latin American formal and nonformal education and training is telling me

there is no other strategy which holds such a high potential for increasing the relevancy, quality, and cost-effectiveness of training in developing countries.

and if that's what your after, I think we are proving that it can be achieved.

APPENDIX

Number of Participants	Dropout Rate	Number of Graduates	Cost per Graduate*	Jop Placement Rate	Number of Employed Participants	Cost per Employed Participant*
100	0%	100	$1,500*	100%	100	$1,500*
(1) 100	40%	60	2,500	60%	36	4,167**
100	50%	50	3,000	50%	25	6,000***
100	5%	95	1,579	80%	76	$1,974**
(2) 100	15%	85	1,765	80%	64	2,344***

*Based on a participant hour of training cost of $1 per hour, <u>without</u> accounting for dropout rates or job placement rates, for a 1,500 hour or $1,500 training program.

** & *** See discussion below.

(1) Training costs per graduate and graduates who practice their trades with retention and job placement rates of 100%, 60% and 50%.

(2) Training costs per graduate and graduates who practice their trades with retention rates of 85% to 95% and job placement rates of 80%.

<u>Discussion</u>: The table shows that training costs, based on the number of greaduates who practice their trades and as compared to training costs with a 100% retention and job placement rate, are increased by 179% to 300% because of the low retention and job placement rates of about 50% to 60%.

If your nation's retention and job placement rates are in the 50% to 60% range, reducing your dropout rate to 15% to 5% and increasing your job placement rate to 80%, will result in a reduction in training costs per graduate who practices his/her trade of about 50%** to 60%***.

If you have $150,000 available for training people in a 1,500 hour training course and your total training costs are $100 per hour of instruction ($150,000), you can increase the number of people you train and who practice their trades from 25 to 36 (with 50% to 60% job placment and retention rates)

to 64 to 76 participants who receive training and practice their trades. Under these circumstances you can easily double the number of people who receive training and practice their trades at no additional cost.

If there are additional costs because of increased materials and maintenance; these costs can be easily covered by integrating production with instruction and also assure that participants have the appropriate training materials and resources required for mastering skills at the competency levels required for obtaining employment. If there are no appreciable increases in materials and maintenance costs, you could double your enrollments once again by recovering 50% of your recurrent costs through production income.