Structured On-the-Job Training In Developing Nations

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Structured on-the-job training (SOJT), adapted to a developing nation environment, can significantly improve, at low cost, the performance capability of workers.

Globalization and competition in products and services have created enormous pressures to increase productivity. Developed nations have risen to the challenge. The same is not true for the developing world where the context of poverty does not permit similar investment for competing internationally. Within developing nations, a rich source of capital exists -- human capability. The problem is how to organize and exploit this potential source of wealth.

This project examined the opportunity and appropriateness for SOJT in developing nations and describes a trial in one African nation, Cameroun.

SOJT is a systematically planned process for designing and carrying out training. Learning takes place at the work site. Experienced workers serve as trainers and provide specific feedback on task execution. There are detailed training plans. The entire effort is integrated and orderly. It is a complete, unified system.

Implementing SOJT in Cameroun

The annual per capita income of Cameroun is \$764 US, making it one of the poorest nations. It is typical of many developing nations: high poverty and unemployment; large foreign ownership; low productivity.

Adapting SOJT to the culture of Cameroun demands analyzing technical capabilities of potential SOJT trainers, adopting teaching strategies that fit their backgrounds, exploiting cultural values and practices that enhance the SOJT experience and verifying linguistic/ethnic compatibility.

The adapted SOJT model was tested to answer three questions: Is it effective in building performance capabilities of workers compared to the usual training approach? Is it cost and time efficient compared to usual practices? Do management and employees have favorable attitudes toward SOJT compared to usual practices?

A controlled study compared SOJT to traditional training center (TC) preparation. The TC group did not gain in speed from pretest to posttest, despite six weeks of training. (See Table 1.) Table 2 compares costs of the two training approaches. The SOJT cost 25% less than the TC training. Table 3 displays the results of a Likert scale type instrument used to determine trainee and trainer attitudes toward the SOJT. All recommended that the company adopt this training approach.

General Conclusions From the Trial

SOJT demonstrated its effectiveness, efficiency, lower cost and high satisfaction ratings. Projected organizational benefits (return on investment) are decreased learning curve, improved worker efficiency and decreased incident rates (e.g. damages, time/cost of clean up, lost productivity). Based on the 43% better performance of SOJT subjects, immediate daily

benefit was calculated at 46,440cfa in savings. Add in decreased incidents (no SOJT incidents; one control group incident valued at 27,000 cfa). Extrapolating over a year, a 3,000,000cfa investment to train 36 workers could potentially yield a 33,000,000cfa savings (1000%ROI).

A final note on lack of improved TC group performance. It spent considerable time in a classroom attending lectures. There was little practice. Equipment was insufficient and obsolete. Practice space was different from the work site.

Summary and Conclusions

SOJT appears to be a "natural" solution for developing countries. It is relatively inexpensive, does not require specialized expertise to create, and implement and has demonstrated very high return in terms of learning transfer and productivity pay-off. Solutions such as SOJT - low cost and high yield - offer developing nations an effective means for meeting global marketplace competition.

Group	Pretest	Postest Mean: 15 min. 40 sec. Range: 14 – 17 min.	
SOJT group	Mean: 27min. 30 sec. Range: 25 – 30 min.		
Control group	Mean: 27min. 30 sec. Range: 25 – 30 min.	Mean: 27 min. 15 sec. Range: 25 – 30 min.	

Table 1. Pretest & Posttest
Trial Times for All Tasks

Table 2. Training Costs in Cameroun Francs

Item	SOJT Cost	Training Center Cost
Trainer salary	0*	680,000
Bonus for training	400,000*	0
Trainee salaries	600,000**	720,000
Development of training	100,000	60,000
Total Cost	1,100,000	1,460,000

- * SOJT trainers continued their regular jobs, but received training bonuses. Training Center trainers were fully dedicated to training.
- ** SOJT trainees trained 15 days; control group trained 30 days. SOJT trainees worked, thus higher salaries. 600,000 and 720,000 based on 12 trainees each.

Total cost of SOJT was 25% less than Training Center version.

Dimension	Instructor Scores	Trainee Scores
SOJT procedure	100	100
SOJT structure	100	95
SOJT use of time	95	98
SOJT relevance of content, method	81	81
Overall Satisfaction	94**	89

Table 3. SOJT Satisfaction Scores*

- * Maximum score = 100.
- ** Interviewed instructors expressed great satisfaction with bonuses and increased status as SOJT instructors.

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