Evaluating To Reduce Training Costs

Valid Shorter Courses
Can Stretch Training Dollars

O. C. Lott

Some improvement in course "quality" can almost always be achieved through evaluation, if the appraisal is followed by earnest efforts to correct the weaknesses brought to light. Instruction methods, instructor qualifications, student motivation, and other factors of any learning-teaching situation are always open to strengthening or improvement.

Why then, is so little intensive course evaluation done?

It is evident that an inducement beyond the enhancement of course quality is needed, if evaluation is to transcend its present desirable-but-not-essential and generally superficial status, and become a "must" and highly intensive and objective exercise, throughout education and training. By directing evaluation efforts more consciously and aggressively toward the goal of shortening courses, and thereby reducing costs, we may locate the lever needed to raise the interest levels of business managers, public administrators and leaders in education and training, with regard to the whole subject of course evaluation.

Properly performed course evaluations not only earn their own way, by leading to improvement in course quality, but, in a great many cases, reveal opportunities to bring about substantial reductions in training costs. These opportunities come to light only under the intense challenging, measuring and objective scrutiny that char-

O. C. Lott

Director, Manpower Evaluation and Development Institute, a private non-profit educational and training research and development organization. Previously consultant to business and industry; Director of Training, Federal Aviation Agency; Director of Training, National Production Authority; Training Supervisor for a large E. I. duPont Company plant and instructor for Alabama Polytechnic Institute, Georgetown University, University of Maryland and The George Washington University.

acterizes thorough, professional course evaluation. Naturally, the largest potential savings show up when evaluation procedures are applied to courses which have been hastily thrown together, or which have been permitted to evolve aimlessly, or to be changed by instructors on a patch-work basis, without regard to clearly defined objectives.

Just as a suitcase will hold a great deal more if it is carefully packed, a training course started with little planing, and without validation of results obtainable by alternative methods, can be "repacked" and with the same instruction, can be compressed into less time.

Instructional Time Elimination

When evaluation is aimed almost entirely at improving the quality of the course, weaknesses are invariably corrected with no thought to speed-up of learning, or elimination of unessentials to shorten the course. The impulse is ever-present to redistribute time so gained to add more emphasis to some subjects in the course, or to insert additional subjects. Only alert, knowledgeable and determined monitorship of evaluative recommendations will preserve the indicated gains. Otherwise, the instructors will instinctively fill the holes, always with ample justification. To use a different form of Parkinson's Law, any subject can fill an unlimited amount of instructional time.

Evaluation should be an investment which produces, overall, a favorable cost/benefit ratio. If it fails in this respect, management's interest in it will remain low. On the other hand, once management discovers that the right kind of evaluation, plus scientific elimination of unnecessary time in instruction programs, pay their own way and often show a "profit," evaluation will at last get out of short pants.

Rigorous, professional course evaluation will become more of our "way of life" in training.

Effective Evaluation Rarely Made

Although sound methods for course evaluation are reasonably well understood, most so-called course evaluations are limited to having the students, and sometimes their supervisors, complete questionnaires at the end of the course, or sometime thereafter. The questionnaires typically ask the students how they liked the course, what they did not like about it, and how they feel it might be improved. If their supervisors are included, they are provided with an opportunity to comment on the apparent values and shortcomings of the course as seen from their vantage point. Needless to say, the students and the supervisors, in responding, sometimes make positive and helpful suggestions.

In general, however, the value of their reactions is severely limited by two factors. In the first place, if the course has been conducted by an instructor with a friendly personality, and the ability to make the subject interesting, the students inevitably develop a liking for him. Since they feel that criticism of the course may reflect unfavorably on the instructor, their liking for him interferes with their objectivity and candor.

Secondly, the students and supervisors rarely have the necessary background, in training and teaching, or exposure to similar courses. They lack the necessary frame of reference or set of standards against which to make more than the most superficial and subjective judgments.

Training is Expensive

Education and training are very costly and rapidly getting more so. Few people look these costs fully in the face. A training course of six

weeks, which involves 15 to 20 students can easily cost \$15,000 to \$20,000 including costs for instructors, course preparation, facilities, travel, student salaries, materials, equipment, and supervision.

Perhaps at the top of the cost pile are the courses for jet pilot flight training. These training sessions may involve a crew of four or more, training one man at a time. Expenses as high as \$1,000 an hour or more just for the aircraft are not unusual.

Some university staffs which offer management training for company executives are charging as much as \$3,500, and more, for less than a week of training for a group of 12 to 15 men, and this is on a non-profit basis.

Since it is probably safe to assume that the costs of education and training will continue to rise, savings which can be realized by improving and speeding up the learning process, as well as by eliminating unproductive digressions, can be expected to increase in value as time goes by.

A Typical Case

Even assuming that costs do not continue to rise, the cumulative effect of relatively small reductions in the length of courses can produce astonishing savings. For example, consider the following hypothetical but not extreme example:

Suppose a national sales organization which hires young men fresh out of college and gives them a basic course of instruction in the product line, administrative requirements, such as reporting, expense policies, etc., and techniques of selling. This company operates a two-week training program for all new salesmen. Averaging 10 students to a class, the company pays them a nominal salary of \$60 per week while in training. Thereafter, they are on straight commission. During their first year, they will average earnings of

\$110 per week for themselves, and earn \$90 per week for the company.

Assume that the company runs the program on a continuing basis, holding 25 classes per year, and that the course is taught by two experienced salesmen, selected at times from the selling ranks to serve a tour of duty in sales training. If these instructors were out selling, instead of teaching, it would be reasonable to presume that they would also earn the company at least \$90 per week.

If, in such circumstances, a major evaluation and restructuring effort were to make possible equal results, through a shorter course, what savings might be expected?

On a two-week basis involving 10 days of training time, the costs are about as follows:

For each class, \$1,200 in student salaries and at least \$600 in instructor salaries. Add \$1,800 loss of income to the company while the students are in class and not out selling, and a similar loss of at least \$360 on the time of the 2 instructors. This amounts to a cost of about \$4,000 per class or \$100,000 per year for the 25 classes.

If the training time could be reduced from two weeks to one week, savings would amount to \$50,000 per year. A reduction in course length from 10 to 8 days saves \$20,000 per year! Over 10 years, the stakes become quite large, and such possibilities are not exaggerated or unrealistic.

Evaluation is Expensive, Too!

How much would it cost to evaluate properly, and thoroughly reconstruct a course such as the one just described, with the principal objective of building a similar course to teach as much knowledge and at least equal skills in significantly less time?

It is not possible to be precise in answering this question since the course is hypothetical. It is possible, however, to arrive at a position from which a ballpark view of the costs emerges. For example, we can assign two top-flight training specialists to the job at annual salaries of \$15,000 each. Their assignment would include preparation of a comprehensive job analysis, which would require time on the road with salesmen who are successful in varying degrees, and with sales managers, company executives, customers, suppliers and manufacturers, for preparing valid course objectives as well as the job analysis. At least six or eight weeks should be allowed for this work.

Next, they will need to study the course structure and materials, and with the instructors, prepare a comprehensive test, covering every bit of information, all principles, methods and skills which are supposed to be transmitted to the students.

All students in a routine class should be given the complete examination before the course begins. This will take about three to four weeks. Then, the evaluators should take the course, as students, which will add another two weeks. At least 10 to 12 weeks will be needed for course restructuring, including further analysis and testing of hypotheses and alternative possibilities.

In all, we can reasonably estimate that the course evaluators will have to spend about six months to complete the assignment. Counting their salaries, and allowing \$5,000 for travel and miscellaneous costs of materials, equipment and supplies, as well as clerical assistance, the investment could amount to as much as \$20,000.

How expensive is this? As has been previously seen, if the course can be

shortened by only two days, without loss of learning, the full cost of the evaluation and restructuring will be recovered in a single year. Each year thereafter substantial savings should continue to accrue, and the accrual rate will be increased if training costs continue to rise.

Summary

Many training courses, particularly those which were put together in a hurry, or without benefit of the competent specialists in job analysis, instruction methods and student motivation, could be taught as well or better in less time, if they were thoroughly evaluated and scientifically restructured.

At present, however, most evaluations are too superficial to provide a foundation of proof that courses so evaluated can be shortened without loss of learning achievement. This is due in large part to the fact that evaluations are mainly looked upon as a means of improving the quality or effectiveness of courses.

Education and training are very costly, and it appears that these costs will continue to rise. Although thorough, professional course evaluation work is also expensive, it can pay its own way and often show a "profit" when used as a means for shortening courses, and thereby reducing training costs. Evaluation, as an important element of education and training administration, and as a science, will emerge far more rapidly when top management sees evidence that it can be used to reduce training costs, or stretch available training dollars further.