Planning Training Activity

the value of the practices survey and hardware inventory

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The payoff derived by a company from its investment in training depends in large measure on the soundness of the plans used to develop or purchase instructional products and programs. The purpose of this article is to discuss an approach to acquiring information on which to base decisions about the course of action an organization should pursue in developing new training products or revising old instructional materials. Because the most frequently publicized planning activity in this area is the assessment of current and future training needs, a few preliminary remarks will be devoted to this topic.

Training Needs Assessment

Industrial trainers, academicians, and training researchers generally agree on the advisability of identifying those personnel problems which can be ameliorated by means of training *prior to* the selection or development of specific forms of instruction. For example, McGehee and Thayer[1] state that "the use of training to achieve organizational goals requires careful assessment of the training needs within a company: a determination of the goals which can be served by training, the people who require training and for what purposes, and the content of training."

More often than not, trainers merely pay lip service to the commonly accepted concept of determining and/or forecasting training needs. In reality, the matter of the selection of training programs usually is decided on the basis of less valid standards than actual company training needs. Consequently, the result is that "much of the training . . . is of a faddish nature; often they (trainers) are much more concerned with training *methods* than with training *needs*. Fascination with a particular technique or the training staff's personal experiences and limitations may determine the nature of the program more often than a consideration of optimum learning circumstances."[2]

A question which comes to mind at this juncture is, why is this important basic step of determining training needs so often ignored in practice? The problem, I think, is not a matter of insufficient interest or written information on the topic. McGehee and Thayer[3] have provided a thorough, well conceived description of the process of measuring training needs which has been quoted and paraphrased in almost all training publications.

Measuring Process: Complex

Rather, I believe the reason why so few trainers attempt to assess instructional needs while preparing plans for training is the complexity of the measurement process. Although the McGehee and Thayer method appears valid, this familiar textbook procedure seems a bit impractical and too sophisticated for use by the average personnel or trainer manager. Few trainers will possess the background in psychometrics and statistics required to perform a number of the suggested analyses.[a]

Assuming, then, that the analytical demands of the textbook method probably will exceed his level of competence in measurement, what can the average training manager do in order to get some idea about the actual training needs of the company he serves? The remainder of my remarks concern a description of three kinds of survey information the average trainer might rely on in making decisions about the content and level of training in an organization. Also, the methods used to analyze this information

will be very basic statistical procedures familiar to most businessmen.

The source of the following suggestions is my own experience in developing an instrument to forecast the training needs of insurance companies while I was employed by a trade association which conducted behavioral research for the insurance industry.

Training Practices Survey

Training practices survey is simply my name for a questionnaire approach designed to collect information which will allow an organization to prepare insightful plans for future training activity. My interest in this article will be the *questionnaire approach*, and not in a particular set of standardized questions or novel question format. Therefore, I will confine my discussion to a description of the three types of information the training specialist should try to collect with a survey form developed on his own, and I will avoid an account of a specific, ready-made questionnaire.

As implied by the term survey, this method of measuring training needs involves polling the opinions of a number of people. For this reason, all employees of the organization associated with the training operation should be requested to complete the training practices questionnaire. This includes line managers who usually retain ultimate authority for training as well as personnel staff who generally advise or offer assistance on training matters. Judicious allocation of training resources can be achieved only if the training specialist has at hand information on training needs which is representative of the whole company.

Complete data of this nature will enable him to identify problems which are relatively specific to one department and problems which confront numerous sectors of the organization. Obviously, training funds will be spent better if they are appropriated for program improvement or instructional product development in areas of widespread or pervasive training need.

Survey Advantages

The use of a survey or polling technique is particularly appropriate for identifying training needs because the questionnaire approach permits collection of information from throughout the entire organization at relatively little cost.

Once a satisfactory survey form has been developed it can be distributed to employees associated with the training operation in all parts of the organization, whether they be located in the same building or across the continent. This feature of the survey approach is especially important in geographically decentralized industries such as the insurance business in which field offices may be scattered.

Specifically, the training practices survey approach calls for the collection of data on *trainer activities, perceived training needs, and available training apparatus.* This information ought to provide assistance in planning the direction and intensity of training activities in an organization.

Trainer Activity

One indirect measure of current training needs is the level and kind of trainer activity. The present activities of trainers offer a clue to an organization's training needs if one assumes there is a relationship between the amount of time spent by trainers on various training tasks and potential cost savings through instructional product development. In other words, it is assumed that training products and programs will be most useful to a company if they are developed to assist trainers with tasks which currently occupy the largest portions of their time.

In order to discover the way employees with training responsibilities spend their time, two kinds of questions ought to be designed to estimate the per cent of time trainers devote to a variety of supervisory and personal activities. The first type of question should be phrased to ascertain the *per cent of his overall activity that the respondent must consign to training.* For instance, the per cent of time he must dedicate to line management duties (e.g., planning and controlling manufacturing or sales operations), personal production (of goods or sales), and personnel functions (e.g., recruitment, selection, safety, and training) should be estimated by each respondent.

The second type of question should be phrased to determine the *per cent of his overall training time that the respondent must devote to a number of specialized training activities.* For instance, respondents ought to be asked to estimate what proportion of their training activities is spent doing on-the-job training, classroom training, professional self-development (e.g., reading training material or attending conferences on training), evaluation of training, etc.

Tendencies Uncovered

Analysis of the information collected on trainer activity should focus upon both the average level of each kind of trainer activity and the degree of agreement among trainers about the amount of each kind of training activity performed. Interest in the survey results will flow from a simple rank ordering of the

trainer activities from the training activity which on the average requires the greatest amount of trainer time to the training activity which on the average requires the least amount of trainer time. Therefore, some statistical index of central tendency like the arithmetic mean or median should be computed for each training activity.[b]

Also, the survey data should be analyzed in order to discover the degree to which trainers differ in the amount of time devoted to each training activity. For this reason, a statistic such as the standard deviation or the interquartile range should be computed for each activity. Those areas which would provide the most fertile ground for program development would rank high in terms of both average trainer time and level of agreement. Results of this nature would indicate that almost all trainers devote a great deal of time to this particular training task. Therefore, it might be wise to reexamine the method by which training is conducted in this area in order to ensure that the training operation is as efficient and up to date as possible.

Perceived Needs

Probably the most direct measures of present and future training requirements in an organization are reports of the needs perceived by those individuals who are closest to the training function. Those employees who customarily work as trainers or plan training activities undoubtedly will be most aware of the strengths and weaknesses of the current training program, including those of various training aids and devices. Furthermore, these same employees probably will be most sensitive to any changes in training needs which forecast the necessity for additional or revised training products and programs.

The questions devised for the survey to measure perceived training needs should be phrased in such a manner as to elicit information on both the severity as well as the prevalence of each training need. That is, the results of the survey ought to suggest how pressing or urgent the need for a particular training program has been judged in addition to how many training people recognize that the particular need exists at all. Let's examine a hypothetical case to illustrate this point.

> At Acme General, Inc. the need for a management development program was mentioned by 65 per cent of the survey respondents, but little urgency was attached to this need. At the same time 45 per cent of the respondents reported a very strong need for development of a training program on closing a sale. In this situation I believe that the pressing demands of those Acme employees connected with sales training ought to be assigned a higher priority in terms of instructional product development than the tepid desires of the majority for a program which apparently would be "simply nice to have."

It should be clear from the example that information on the urgency of training needs must be collected in conjunction with data on the universality of the need in order to properly establish priorities for the development of training products and programs.

Available Equipment

Knowledge of the equipment with which offices and departments in the organization are currently supplied is very useful in the selection and design of training products. Frequently, an ordinary piece of office equipment such as an extension telephone system or tape recorder may be used to supplement training. Also, special apparatus previously purchased for a specific training program, such as a record player or video tape unit, may prove useful for additional training activities. Therefore, in order to stretch the training dollar to the maximum, it appears important for the training specialist to be aware of the kinds of equipment owned by the organization which might be incorporated into new or revised training programs.

It is a common practice for companies to supply training facilities such as vestibule schools with old or surplus equipment which is no longer required for production. What I am suggesting is akin to this familiar practice; viz., purchasing or preparing training software which may be adapted to equipment typically used for other purposes is an important consideration in reducing training costs. Naturally, thorough planning requires that the adscititious (supplemental) training usage not interfere with the work normally performed with the equipment.

An Example

Let's examine a brief example of how information concerning available hardware may be used in planning training.

> The results of a training practices survey revealed that all of the field offices of a large insurance company owned tape recorders. This piece of information enabled training specialists to plan diversification of the instructional media in training programs by incorporating audio tape material. Furthermore, this elaboration of the training program was achieved without creating concern about inordinate costs for the equipment required to play back the instructional tapes.

An inventory of potentially useful training apparatus may be obtained by including an equipment checklist in the training practices survey. All types of equipment should be mentioned in the checklist, such as display equipment (blackboards, easels, etc.), business machines and inter-

office communications equipment (desk calculators, telephone extension systems, etc.), playback equipment (movie or slide projector, record player, etc.), and record and playback equipment (audio or video tape units). Information regarding the manufacturer, model, and year of some types of equipment will be required where problems of incompatibility exist (e.g., pre-1970 video tape equipment).

General Remarks

Feasibility of a questionnaire approach and the validity of the information obtained thereby are dependent on a number of factors which must be considered before a training practices survey is attempted. Both the quality of the questionnaire and the manner in which the survey is conducted will affect the accuracy of the data collected.

A preliminary test of the questionnaire with a small sample of respondents will enable the training specialist to answer a number of questions about the strengths and weaknesses of his survey form prior to distributing the materials to the entire group of trainers in the organization. For example, a preliminary study of the questionaire should yield information on how employees are likely to react to the material: Do they appear to understand the meaning of the questions? Do they find the survey a burden to complete because of the number of questions they have been requested to answer? Do they consider objectionable any words or topics included in the questionnaire?[c]

Understanding Essential

Generally speaking, the cooperation received from employees in answering the questionnaire will be determined by the manner in which the survey is presented. The employees will be far more likely to answer the survey completely and honestly if they fully understand the purpose of the questionnaire. It is, therefore, incumbent upon the training specialist to provide a detailed explanation of the survey objectives and to convince respondents that their answers to the questionnaire will be instrumental in assisting the training department to develop instructional products and services which satisfy *their* most urgent training needs.

Finally, it should be pointed out that the survey method described does not provide a complete picture of the training needs of a company. For example, one of the vital areas of information neglected in this approach is data concerning which employees require training. However, the approach does offer a method of securing accurate information regarding the subject matter for future instructional products as well as the format of the proposed training.

References

1. McGhee, W., and P.W. Thayer, *Training in Business and Industry*, John Wiley & Sons, 1961, p. 24.
2. Bass, B.M., and J.A. Vaughan, *Training in Industry: The Management of Learning*, Wadsworth Publishing Company, Inc., 1966, p. 85.
3. Op. cit., chapters 2-4.

[a]For example, in order to examine the tenor of the organizational climate as required by McGehee and Thayer's organization analysis, the trainer has to be conversant with a variety of advanced psychometric procedures which are used to combine statistically a number of separate quantitative and qualitative indices of the character of the work environment.

[b]The rudimentary procedures required to compute the statistics referred to in this section are described in most basic statistics texts. For example, see Blommers, P., and Lindquist, E.F., *Elementary Statistical Methods*, Houghton Mifflin Co., 1960.

[c]In one study I performed with a training practices survey the preliminary test of the questionnaire revealed that representatives of combination companies (which are unionized frequently) objected to the use of the term "quota" on the survey form. The companies did not want to give the impression that standards for performance were set at the discretion of the field office managers (who were the respondents in this particular study) when in fact they were established by collective bargaining. Therefore, the more innocuous term "goal" was used when polling combination companies in order to prevent any misunderstanding of management and union perogatives. **USE ASTD**

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