

Needs Assessment in Depth: Professional Training at Wells Fargo Bank

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Abstract. The Assessment of Technical Credit Skills project at Wells Fargo Bank employed a three-phase needs assessment approach that began at the corporate level and ended with job-relevant assessment of individual employees' skills. This program was developed to identify and assess the lending skills and knowledge that Wells Fargo loan officers require for successful job performance. Tests were designed based on an exhaustive task analysis of lending functions within the bank. A computer-based scoring and reporting system gave test results confidentially to participants, with a complete breakdown of objectives missed and relevant learning resources available. In addition, an unlimited retesting option was made available. The computer system reported overall performance averages and scores by regions and skill categories to bank management. Managers and supervisors at different levels were provided with only those group data relevant to their own decision-making requirements. Follow-up survey results showed acceptance of and general satisfaction with the program.

Problems of Needs Assessment in Training

Monette (1977) points out in his review of the literature on the definition of educational needs and needs assessment approaches:

There appears to be a general consensus in the literature on need that felt needs or wants *per se* are in-

adequate for defining educational objectives.... Likewise prescriptive needs ("real needs") *per se* are inadequate to the task. (p. 125)

In other words, neither simply asking potential learners what they want or need to learn nor solely prescribing enroute objectives to move learners from point A to a point B produces effective needs assessment and instructional development. Nevertheless, Kirkpatrick (1977) reports that in his training evaluation workshops, most trainers indicate that their determinations of both general and rather specific training needs are based either on felt needs or wants expressed by management or on their own subjective judgments concerning what employees should know. The risks involved in developing training programs based upon such incomplete assessments of need are many and obvious: Costly training may prove ineffective because the existing problem was not amenable to a training solution; training may fail to improve performance because it does not identify and address critical skill or knowledge deficits; or trainees and their supervisors may resist training imposed from above may, therefore, fail to participate in training or to transfer training to their actual work situations.

A Three-Phase Model at Wells Fargo Bank

The Assessment of Technical Credit Skills (ATCS) project recently carried out at Wells Fargo Bank's Retail Training Division exemplified a different approach to training needs assessment. It followed a three-part process model developed by McGehee and Thayer in 1961 and expanded by Moore and Dutton (1978). The model outlines a process that can increase the likelihood of accurate and complete need identification and of acceptable and ef-

fective assessment of training functions. This three-phase process synthesizes the recommendations of many other researchers and program evaluators in business and school settings, including Kaufman's problem-solving model which emphasizes client involvement (cited in Trimby, 1979) and Odiorne's cybernetic approach (Odiorne, 1979).

The model's three parts or phases, Organization Analysis, Operations Analysis, and Individual Analysis, are interactive and may be intentionally interwoven for maximum effect. (See Table 1.) Wells Fargo's ATCS project processes and outcomes illustrate the nature and importance of these three components. They also suggest ways in which the potential impact of a training program may be influenced by the thoroughness of these initial analyses.

I. Organization Analysis: Discrepancy Identification

Organization Analysis involves asking at the corporate level, "Where does it hurt?" and "How much does it hurt?" Organization goals are compared to performance in major sectors of the company (e.g., manufacturing, retail sales, etc.) to spotlight problem areas. Problems may then be weighted or prioritized based upon how much they are costing the company in direct expenses or loss of market, how many employees may be involved as potential candidates for training, and how clearly employees and their supervisors perceive any performance problems.

At Wells Fargo, Organization Analysis focussed on lending as a problem area. Bank management saw data on the number, categories, and quality of loans being made at Wells as compared to other banks and lending institutions,

data on loan officers' compliance with federal regulations, and concerns about opportunities for professional skills development voiced by loan officers themselves as indicating a discrepancy between corporate goals and the current state of affairs.

Senior management in lending enlisted the aid of the training division to further define the parameters of the problem. Loan officers at all levels throughout the retail bank were interviewed and surveyed to determine types of lending functions performed and to gather officers' perceptions concerning the contingencies affecting their performance, information needs, and possible training interests. Existing training resources were also reviewed. Gayle Coates, then Vice President in charge of Retail Bank Training, outlined the results of their investigation as follows:

TABLE 1. Three-phase needs assessment

Phase	Function	Examples from ATCS
I. Organization Analysis	Identify and prioritize discrepancies between corporate performance and corporate goals	Numbers and qualities of loans were below goals
II. Operations analysis	Perform in-depth job/task analysis—to discrete behaviors	INTERVIEWS with subject-matter experts in the bank. TASK ANALYSIS item: "The Loan Officer will identify credits and portions of the credit analysis to which Regulation B applies." QUESTIONNAIRE item: "Employee to identify how often s/he performs task"
		3 = Frequently 2 = Occasionally 1 = Rarely 0 = Never
		3 2 1 0 "Identify credits and portions of a credit analysis to which Regulation B applies."
III. Individual analysis	Assess each employee's performance on identified tasks	TEST question: "Which of the following most accurately reflects the scope of Regulation B: a. Regulation B applies to all consumer lending and only to commercial loans to individuals; b. Regulation B is a consumer lending credit law; c. Regulation B applies to all individual borrowers; d. Regulation B applies to all aspects of consumer and business lending."

Note: The examples in column three are from Deden-Parker (1978), Deden-Parker and Rankin (1978), and from the Level I test.

1. There were no standards by which loan officers could measure their own performance. They had no definition of what makes a "good" loan officer, and, hence, no idea of what they should do to qualify for promotions. This lack of objective standards also, of course, affected supervisors' ability to evaluate officers' work and provide appropriate guidance, and the training division's ability to provide on-target, effective training.

2. Previously, lending functions had been broken down into three major categories by type of loan: real estate, consumer, or commercial. The few credit training resources available at the bank were organized along these lines and taught only the simplest functions. These categories were perceived as inadequate units by which to organize future credit training because the training staff had discovered that many essential lending activities crossed categories.

3. Similarly, the bank had previously equated loan difficulty with loan size. Discussion with lenders proved that this simply was not true. Instead, loan difficulty depended primarily upon the number and complexity of interrelated factors which influenced the lending decision and which might require periodic re-evaluation.

A new list of things lenders had to deal with or know about was developed and divided into nine general and six specialized lending skills areas (Table 2). All categories were divided into three levels of expertise. These levels were based primarily on observed job responsibilities and secondarily on job titles (see Table 3). Figure 1 shows the relationship between skill areas and skill levels.

TABLE 2. Skill areas

General	Specialized
Credit communications	Small business administration loans
Legal considerations	Agricultural loans
Credit laws	Commodity loans
Loan purpose, repayment, terms	Operative builder loan
General knowledge	Income property loans
Loan policy	Accounts receivable/inventory loans
Problem credits/workouts	
Credit analysis	
Analysis of operations	

TABLE 3. Skill levels

Level	Description
Level I	Branch Loan Officer who specializes in real estate loans, has had 2 years in monthly payment loans, etc., makes commercial loans to individuals and small businesses not involving much analysis of annual statements.
Level II	Loan Officer, Assistant Manager, or Manager who is fully knowledgeable in most real estate and monthly payment loans; handles principally commercial loans of medium complexity involving analysis of: Business management—not too complex Product—not too exotic Purpose—easily identified
Level III	Loan Officer, Assistant Manager, Manager, Assistant Loan Supervisor who specializes in complex commercial loans: Business management—complicated, influenced by many outside factors Product—exotic or no clearly defined history or trends Multipurpose

Note: Adapted from Gayle Coates, V.P., Retail Bank Training, interdepartmental memo, "Loan Officer Expertise Levels," April 12, 1978.

So, from an organizational point of view, the problem was defined. Lending personnel at all levels wanted to know where they stood in terms of some agreed-upon performance standards. Once they could identify specific strengths and weaknesses, they would need access to appropriate study references and training resources.

Organization Analysis developed not only a clearer picture of the deficit situation but also built support for further assessment and potential training or other solutions. The investigation sparked interest and desire among

lenders to find out what training they needed and to have that training available. Senior loan people also became enthusiastic about developing a program that would define, assess, and teach essential lending skills. Their support was essential in obtaining the budget and subject-matter experts needed to conduct the next phases of the needs analysis.

II. Operations Analysis

The next phase was Operations Analysis: finding out precisely what skills lenders needed on the job. To be useful, this information must go beyond "Make Type X loans" or "Comply with federal and bank policies"—the kind of statement often found in job descriptions of the kind Wells Fargo had thus far collected—to discrete behaviors which could be objectively assessed and specifically taught. Operations Analysis involves detailed delineation of job tasks. Working from the categorized list of lending topics developed in the first phase, training staff members and I interviewed a number of people with recognized expertise in each area to find out what they actually *did*—what information they used, how they used it,

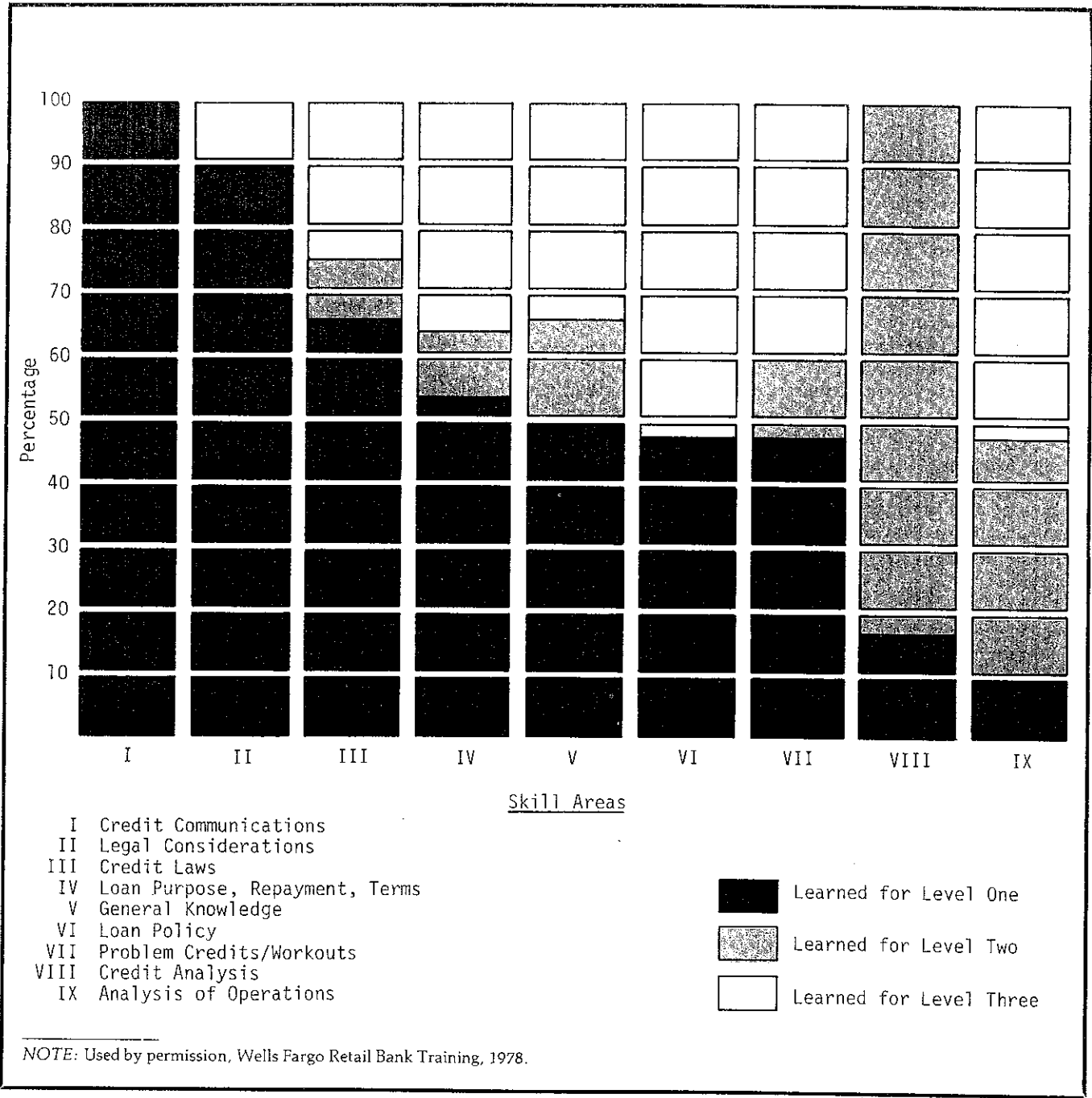


FIGURE 1. Progression of skill levels.

what procedures they followed, etc., in relation to each topic. From interview notes, we then wrote behavioral descriptions of loan officer tasks in each skill area. The behavioral descriptions were checked and rechecked with our source experts at this stage until accurate and complete statements were developed. The task analysis process identified a total of 158 major lending skills.

Once the entire task analysis was completed, it was converted into a questionnaire. Table 1 illustrates the close relationship between task analysis and

questionnaire items. On the questionnaire, loan officers were asked to rate each skill in terms of how frequently they actually used it on the job. The questionnaire was taken through a series of one-on-one tryouts in which designers sat with loan officers as they responded to the items. Based on these tryouts, the directions and some of the items were revised for greater clarity. One hundred and two of the revised Lending Skills Questionnaires were then mailed to loan officers evenly distributed among all the bank's regions. For

the mailing, loan supervisors identified 34 officers they estimated to be working at each of the three skill levels. Thirty-three (or 97 percent) of the estimated Level I officers responded, as did 28 (or 82 percent) of the Level II officers and 32 (or 94 percent) of the Level III officers.

One factor that might have threatened the validity of our questionnaire results would have been inaccurate estimation of officers' skill levels by their loan supervisors. Questionnaire results showed, however, that the level estimates were generally accurate, because

distinct differences in the number, pattern, and complexity of tasks performed by respondents at different designated skill levels were evident.

Questionnaire results indicated that the Task Analysis was accurate, both in the behavioral task descriptions and in the assignment of skill levels. Two descriptions were rewritten, and one of them was moved to a different level designation. Skill-level designations were removed from the specialized lending areas, as mastery of skills in these areas was related more to the type of clientele served by a given branch office than to an officer's performance profile in the more generalized skill areas listed in Table 2. A few tasks described in the specialized areas were omitted as a result of questionnaire responses and follow-up consultations which indicated that they were rarely performed.

As often happens in front-end analysis, a potentially important non-training need was identified via the Lending Skills Questionnaire. Questionnaire results showed that loan officers gradually accumulated more and more lending responsibilities as they moved up in skill. While such development may sound reasonable, the actual situation shown by questionnaire responses was that loan officers who had acquired specialized skills in dealing with more complex loans still spent major portions of their time performing the same tasks they did when they were beginning lenders. This practice could very well interfere with the achievement of one of senior management's basic goals: greater and more profitable loan activity in the more complex and specialized areas. The report of questionnaire results included this finding, identified it as an organizational, rather than a training-related situation, and recommended its consideration by bank management.

The techniques used in the Operations Analysis phase—interviewing, task analysis, and administration of a task analysis-based questionnaire—enabled us to collect and verify a large amount of information about numerous complex job tasks performed by thousands of people relatively easily and quickly. (The Operations Analysis was completed in 2 months by two people, one of whom was assigned to the project on a less than full-time basis.) Our data collection processes also continued building enthusiasm and support for the project among lenders at all levels. Those who had been with the bank

longest and were in positions of considerable responsibility were especially pleased at the thoughtful and meticulous attention being paid to the needs and wants they had expressed earlier. This support was to become critical in the third and final phase of the project: Individual Analysis.

III. Individual Analysis

Individual Analysis involves determining as accurately as possible each employee's strengths and weaknesses in the performance of job tasks indentified in Operations Analysis. This may be accomplished via interviews, questionnaires, tests, employee or supervisor records of problems and achievements, devised situations such as role play and inbasket exercises, or tests (Moore & Dutton, 1978).

The function of Individual Analysis in training needs assessment is to identify which and how many employees actually have what specific skill or knowledge deficits that can be ameliorated with training. Thus, Individual Analysis is essential for making sure later that the right training is delivered to the right employee. Without this step, it would be difficult for a training program to be developed or implemented in a cost-effective way. With the information provided by Individual Analysis, a training department can assign priorities and develop first those programs that are most needed and, therefore, most likely to have a visible effect on individual and corporate performance.

ments, case studies, or descriptions—could be gauged at this time. While the great majority of the skills identified in the task analysis were amenable to such testing, certainly some of the more critical skills were necessarily omitted from the assessment process.

Available to support the testing program was a computer hardware-software system called "Pulse," purchased by the Training Division from Radix-Capson as part of a long-term development process and installed while the tests were being developed. The Pulse system allowed simple, timely, and complete record-keeping of employees' training status, plus test scoring, item analysis, and, extremely important to the credit skills project: (a) confidential feedback to individual employees concerning their test performance, complete with objectives and reference to training resource citations for missed items; (b) group reports by region, topic (unit), etc., for use by management, and (c) ready access to retesting as necessary to master tested skills, with feedback provided after each test. With tight control over test confidentiality ensured by the computerized system, the threat of testing minimized by the unlimited opportunities for retesting, plus confidence that test questions derived from their task analysis really would be relevant to on-the-job performance, project staff proceeded to develop a set of objectives-based lending skills tests at skill Level I. (Table 1 shows the relationship of sample test questions to the matching task analysis and questionnaire items.)

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Due to pre-established budgetary restrictions, the Wells Fargo needs assessment work had been undertaken with the constraint that, for the present, individual assessment would be limited to paper-and-pencil testing only. Thus, few of the subtle interpersonal interaction and judgment skills important in successful lending could be assessed. Only those judgments about a loan or loan application that could be presented via written material—docu-

Tests for each of the nine general lending skill areas were developed by project staff members and subject-matter experts working in a team situation. Small-scale, one-on-one test tryouts were conducted as with the questionnaire, and necessary revisions were made. The tryout-and-revise cycle was repeated as many times as necessary in order to develop valid and reliable test items.

At the same time, project staff began

a major effort to convince regional loan supervisors to use the testing program. Letters were written, support was obtained from critical senior managers, and meetings were held to introduce the testing program. At the meetings, training department representatives emphasized the confidentiality of test results and the potential usefulness of group data for assessing training needs. Despite prior and ongoing support for

Although some problems were encountered in using the computer system for the first time, the loan officers soon were sent their confidential test reports—scores plus objectives and references for items missed on each of the skill area tests—and project staff had their first group report and item analysis to study.

After the test and computer-system debugging which followed the first re-

- Collect information which would be helpful in planning and developing follow-up training resources (transition from needs assessment to program development).

Project staff were also interested in discovering whether there were any differences among the responses of junior, middle, and more senior loan officers. Equal numbers of surveys were therefore sent to officers in each group.

“This three-phase process synthesizes the recommendations of many other researchers and program evaluators in business and school settings. . . .”

the project from many participants, the idea of testing a professional group was not readily accepted by all. Roadblocks raised in many meetings included supervisors' assumptions that their loan officers would object; that, as good supervisors, they already knew enough about their subordinates; and that, since no test could possibly measure real-world skills, testing would be an offensive waste of time and money.

Finally, another strategy was tried. During meetings, first senior managers and then supervisors were given sample tests which were immediately scored. Test resistance was overcome as people saw that the test questions were actually and obviously on things loan officers needed to use on the job, that test feedback was clear and simple and an easy aid to looking up information relating to missed items, and that mistakes, which were made by everyone, were opportunities for growth rather than occasions for intimidation.

At this point the test development process, the computer support system, and the “sales” effort came together. The nine Level I tests were administered to all lending personnel, from the regional manager down (a total of 83 officers), in one of the regions. The tests were administered in a centrally located classroom in much the same way that college entrance exams are given. This was done to protect test security, as well as to ensure fair testing procedures. Answers were recorded on computer cards.

gional tryout, the Level I testing program was carried out on a region-by-region basis. All planned system elements—the test scoring and confidential feedback, retesting options, and group performance reporting—were implemented. While, as previously mentioned, few credit training resources were available, existing Wells Fargo credit references and resources were integrated into the computer-delivered restudy suggestions contained in officers' test report feedback.

By the summer of 1979, 1 year from the start of the credit skills project, all regions (1400 employees) had been

One hundred and sixty-three, or roughly 50 percent, of the loan officers queried completed and returned the survey: 43 junior, 42 middle, and 78 senior officers. Despite survey-identified differences in job functions among the three groups, the majority of all officers at all levels had the same opinions regarding the credit skills testing program. They accurately perceived the self-assessment and management functions of the program and were well-introduced to the program by their superiors and the training department. Respondents reported that the tests and test feedback reports were clear and easily understood. After receiving their test reports, officers saw the tests as ranging from “fairly accurate” to “somewhat inaccurate” in reflecting their actual knowledge. Split between these two judgments, junior-level officers were the least satisfied with test results.

In the process of taking the tests and using the feedback, loan officers moved from a neutral to a distinctly positive attitude toward the program. They ex-

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tested with the Level I tests. In June, a survey questionnaire (Deden-Parker & Hayes, 1979) was sent to a small but regionally representative statewide sample of 328 of the tested loan officers. The purposes of the survey were to:

- Check once more on the accuracy of the needs assessment by asking testees to identify strengths and weaknesses of the testing program; and

pressed strong support for regular and large-scale program implementation. They became involved in the restudy-retest cycle and expressed eagerness for follow-up training to remediate test-identified weaknesses. In terms of preferred training modalities, officers favored, in order, classroom instruction, on-the-job training, and self-study books.

Outcomes

The needs assessment process thus functioned successfully for Wells Fargo Bank by maintaining the problem-solving mode emphasized by Kaufman and others as an essential characteristic of such efforts. Working from Organization Analysis through Operations and Individual Analysis, training needs were more and more precisely and useably defined. Clients were kept informed and involved so that they saw the project as an effective way to develop solutions for real performance problems. The one major deficiency in the process—indeinitely postponed assessment of some of the subtler interpersonal, judgmental, and risk-taking aspects of lending—began in Operations Analysis and was perceived by all. This deficiency could, if left unattended, possibly limit the maximum effectiveness of loan officer training. If addressed after loan officers are able to demonstrate mastery of the more basic skills and knowledge assessed by the present system, this more involved process could be seen as timely and worthwhile. It would require major client involvement, because regional and branch supervisors would have to be involved as observers or assessors. The ability to move into such a potentially sensitive area of assessment would emphasize the value of the earlier client participation and education built into the three-part needs analysis process employed throughout the project.

Meanwhile, the project has begun highlighting specific areas in which training or improved training is needed and has helped motivate officers to self-assess and to pursue such training. During the last half of 1979, Level II tests were developed and implemented. The results of Level I and Level II testing enabled the Retail Bank Training Division to compose a well-documented plan and budget request for loan officer training program development. This program development is now taking place.

Summary

The Assessment of Technical Credit Skills project conducted by the Retail Bank Training Division of Wells Fargo Bank demonstrated the implementation of the needs assessment model outlined by Moore and Dutton (1978). The

model's first component, Organization Analysis, resulted in corporate priority status being given to an assessment of loan officer training needs. The second major step, Operation Analysis, yielded a behavioral analysis of 158 major lending skills in 15 job areas and three difficulty levels. At this point, the decision was made to limit analysis to skills which could be assessed via paper-and-pencil testing. This eliminated some loan officer interaction skills from the analysis. In the final step, Individual Analysis, loan officers were tested on the skills previously identified. Loan officers' performance on and response to the tests identified specific training needs and indicated that the assessment process had created a positive attitude toward further testing and training. Responses also suggested that the impact of training may be limited unless interaction skill needs are also analyzed and assessed.

Conclusions

The three-part analysis model was found in this case to be useful in planning, conducting, and analyzing the needs assessment process in a corporate training context. It provided for integration of management's expressions of felt needs with techniques of behavioral task analysis and with the need to maintain positive client involvement. The model served as a way of knowing and anticipating "what comes next" in a complex needs assessment process. Moore and Dutton's work, in particular, also offered a variety of means by which data could be collected during each analysis phase. This was helpful and should enhance the model's generalizability to a broad range of contexts.

Further studies and applications will be needed to answer such questions as: How can human resources development, organizational development, training, and personnel departments interact most effectively in and benefit mutually from in-depth needs assessment? How does this process look, and how well does it function, in larger and smaller scale training operations? Can generalizable guidelines be developed for deciding when it would or would not be cost-effective to use the complete model? How do training programs developed from in-depth needs assessment compare in form and outcome to programs derived from other processes?

At Wells Fargo Bank, the model was used in performance of a complex needs analysis in a somewhat sensitive situation. Skilled professionals, in many cases with major management responsibilities, became sufficiently convinced of the process's merits to participate in a lengthy and challenging testing process. Because the test items had been developed from a careful analysis of the tasks they performed, loan officers could see a clear relationship between test questions and job requirements. The needs assessment process thus resulted in a more positive view of testing and training as well as in a clearly defined direction for upcoming training program development. This experience suggests that the three-phase needs analysis model holds promise as a powerful means of identifying and demonstrating needs, of developing client support for testing and training efforts, and of justifying investments in training.

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