Training Needs Analysis for Senior Managers: The Assessment Center Method

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Described is the implementation of a Management Development Assessment Center in the New Jersey Department of Transportation for the diagnosis of managerial skill strengths and weaknesses. The Assessment Center Method can be used as an effective training needs analysis. The need to assess the skills of middle managers after long careers in the agency became critical when a large number of retirements from high-level positions was imminent. A more speedy and effective analytical device than subjective and standard procedures was appropriate in this circumstance. The result of the implementation and continued use of the Assessment Center Method has contributed to more effective management throughout the agency in a variety of ways. The Assessment Center Method is therefore recommended as a training needs analysis for engineers and other professionals in state transportation agencies.

The Assessment Center Method is a structured procedure used to identify managerial skills and predict future behaviors. It has been used for more than 20 years in private and public sector organizations.

Assessment Centers have three objectives: (a) select personnel to fill immediate and specific positions, (b) determine (as a training needs analysis) individual development and career planning needs, and (c) identify (at a professional entry level) individuals with management potential. To better understand the application of the Assessment Center Method for needs analysis, it is necessary to define it for any purpose and acquaint the reader with the details of the method.

The Assessment Center Method consists of conducting an analysis on a targeted job, assigning and training an administrator, and selecting and training assessors. Subsequent to the job analysis, job behaviors are categorized and ranked in order of importance. These behaviors are categorized under a term known as a "dimension." The term dimension is used for specific behaviors, or groupings, in order that they not be misunderstood. This was in preference to the typical knowledge, skill, ability or attribute descriptor.

These dimensions categorize specific behavioral terms. For example, for oral communication observed in a supervisor-subordinate interview, such behaviors as eye contact, voice tone, facial and hand gestures are evaluated. Or in the case of delegation in an in-basket exercise, such behaviors as how many times items are delegated and whether they are delegated to appropriate or inappropriate persons are assessed.

Appropriate simulation exercises are designed around selected dimensions such as in-basket, leaderless group discussions, interview, fact finding, and problem analysis. Candidates participate in each exercise and are observed by assessors one-to-one, or more typically, one-to-two. The candidates have completed the center at this point.

The assessors remain and complete written reports on each of the candidates and then integrate the collected data and rate the candidates on each of the dimensions. Dimensions are evaluated by each assessor on a five-point scale from 1 = poor, significantly below criteria for successful performance at the next level, to 5 = excellent, significantly above criteria required for successful performance at the next level. For developmental purposes all ratings from 1 to 5 are considered in the discussion among the candidates, their immediate supervisors, and the administrator. However, ratings of 1 or 2 are focused on heavily with regard to the immediate need for development.

Following the 1-week Assessment Center and within 3 weeks, the candidate receives feedback from the center administrator and is provided a descriptive report of the results. In a subsequent meeting, the candidates, their immediate supervisors, and the administrator design a development plan for the following year.

HISTORY

In 1978 the New Jersey Civil Service Department offered the New Jersey Department of Transportation the opportunity to use the Assessment Center Method to test candidates for two top-level managerial positions as an innovative and desirable alternative to standardized civil service examinations. The first examination was conducted with 5 candidates and 10 assessors for the position of regional maintenance engineer. The second examination was conducted with 5 candidates and 10 assessors for the position of director of the division of central services.

A direct result of the participation of the New Jersey Department of Transportation managers was the transfer of newly learned skills centered on observing and defining job-related behaviors. The impact of the assessor training was acclaimed through feedback to the personnel officer; managers noted it was the best executive development program in their experience.

The effect of this positive feedback led to a discussion of how the Assessment Center Method could be useful in the New Jersey Department of Transportation. Although the department had a core of excellent training programs at the management level, the identification of needs and output was far too general. A revitalization of the management development effort department-wide was considered.

Specifically, a manager may be proficient in oral communication and not need an active listening course, yet a course might be held for a particular level of employee with no prior evaluation except an individual's belief in a possible need or a
desire to attend. In the Assessment Center it is recorded by
direct observation whether a candidate is an effective listener.

Another case would be the skill of delegation, which is
rarely addressed in the classroom, but if a manager does not
possess such a skill it can be dysfunctional to an organization.

It is explicit when a candidate is presented with 10 opportu­
nities to delegate in an in-basket exercise and only does so
two or three times; or actually delegates five times but each
time to an inappropriate person.

The decision was made to use the Assessment Center for
executive development, as well as a career development pro­
gram for lower-level managers.

The project began with the early support of the com­
mis­sioner and was implemented by the director of employee and
support services, the director of personnel, and the bureau chief
of training. The material, the training of the administrator, and
the subsequent validation of the job analysis were all purchased
from a consulting organization in the field of the Assessment
Center Method.

The position for which the Assessment Center was designed
was that of a division director/regional engineer. Generally, this
person oversees a staff of from 150 to 800 employees. Respon­
sibilities include developing middle managers, evaluating perfor­
ance, determining work assignments, and ensuring results
of activities.

The technical aspects of these positions have a diversity that
was not addressed in the developmental system of the Assess­
ment Center.

A job analysis was conducted to determine the performance
behaviors required for the 21 positions at the level of division
director and regional engineer. The job analysis is necessary as
the foundation for defining the job behaviors that are cate­
gorized under a dimension and ranked according to impor­
tance. Exercises simulating these behaviors were then com­
pounded. An example of the necessity for conducting an accurate
job analysis is the selection of exercises based on that analysis.
For example, if the job analysis indicates that the supervisor is
involved more frequently in areas of coaching, counseling, and
directing in a one-to-one situation, then the exercise selected
should be a supervisory-subordinate problem-solving or coach­
ing exercise, not a leaderless group exercise. The behaviors
sought here would be sensitivity, oral communication, and
development of subordinates.

On completion of all of the facets of the job analysis, 22
dimensions were identified as important to success in the posi­
tion of division director/regional engineer.

Once the dimensions were identified, questionnaires were
completed by seven of the top managers who rated the impor­
tance and observability of each of the following dimensions:

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Control</th>
<th>Decisiveness</th>
<th>Delegation</th>
<th>Development of subordinates</th>
<th>Extra-organizational awareness</th>
<th>Extra-organizational sensitivity</th>
<th>Initiative</th>
<th>Job motivation</th>
<th>Judgment</th>
</tr>
</thead>
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<tr>
<th>Leadership</th>
<th>Listening</th>
<th>Oral communication</th>
<th>Oral presentation</th>
<th>Organizational awareness</th>
<th>Organization sensitivity</th>
<th>Planning and organizing</th>
<th>Sensitivity</th>
<th>Technical-professional knowledge</th>
<th>Tolerance for stress</th>
<th>Work standards</th>
<th>Written communication</th>
</tr>
</thead>
</table>

After each dimension received a numerical ranking it was
reviewed and 12 were selected. Of those, four (job motivation,
tolerance for stress, initiative, and work standards) were
removed because of the concern that they could not be easily
developed. The final list of dimensions with substitutions,
definitions, and appropriate clarifying information is given in
Table 1.

Dimensions in the decision-making category were revised as
follows:

Analysis: Identifying problems, relating data from different
sources, securing relevant information, and identifying possible
causes of problems.

Judgment: Making rational and realistic decisions that are
based on logical assumptions and that reflect factual informa­
tion and consideration of organizational resources.

After review of these data and consideration of the needs,
four types of Assessment Center exercises were determined to
be appropriate for use in the developmental system:

1. Interview simulation,
2. Leaderless simulation,
3. In-basket, and

To establish which exercises to use specifically, the Assess­
ment Center administrator and the consultant reviewed several
exercises that were designed to elicit the desired behavior.
Exercises were written to reflect experiences primarily within
the government setting.

An example of such an exercise is the leaderless group
discussion. Six candidates are seated around a table with an
instruction sheet for the exercise. In this case the administrator
reads the instructions to the candidates. They are required to
role-play persons called in as consultants to a government
agency to resolve four specific problems and are given 1 hour
for this discussion. The assessors are each preassigned one
candidate whom they observe closely using a checklist to
record specific descriptions of behavior such as how long it
takes the candidate to speak, what specifically is said, how
many times declarative statements are made or questions
asked, if the candidate keeps track of time or acts as mediator
between disagreeing members, and many more specific
behaviors. At the end of the hour the administrator prepares
the candidates for the next exercise while the assessors complete
their written reports and rate their candidates.
IMPLEMENTATION OF THE ASSESSMENT CENTER

In March 1981, the Commissioner sent a memorandum announcing the establishment of the department’s Assessment Center to all employees at the bureau chief level (third layer of management) and asking for self-nominations for the new program. An initial group of six candidates were to be selected from the nominations received. The six would be randomly chosen from different departmental units to participate in a 2-day Assessment Center.

Assessors were selected from individuals at the division director/regional engineer level and above. These individuals received 1 week of assessor training immediately preceding the Assessment Center during which they were taught skills in observing, recording, classifying, and rating behavior.

Following the Assessment Center, the administrator composed a final report with developmental recommendations and also conducted feedback sessions with each candidate. The candidate received a copy of the developmental report. The report was not placed in the individual’s personnel file but remained confidential in the Assessment Center office.

During the first 2 years of the program, the candidate’s supervisor did not participate in the feedback meetings nor receive a copy of the report. Of the original 80 managers notified about the Assessment Center in 1979 there were 62 volunteers and all have been assessed. Of the original 21 senior management positions toward which the Assessment Center was directed, 11 were vacated and promotions occurred from the ranks incorporating Assessment Center data.

A change in administrators of the Assessment Center accounts for changes in a number of elements, such as placing each participant in assessor training immediately following a center activity including the candidate’s immediate supervisor in the feedback sessions, and also providing the supervisor with a copy of the candidate’s ratings. In addition, the employee’s progress is jointly planned and becomes part of the performance appraisal system. The behavioral weaknesses defined with a rating of “1 = poor” or “2 = less than adequate” are addressed in a number of ways that include training, counseling, job rotation, or special assignment, and preparing the candidate to increase skills for promotional opportunities. The individual development plan for Assessment Center candidates then plays a role in the future development of the candidate by itemizing skill needs on which to focus training opportunities.

ADVANTAGES TO THE CANDIDATE

Immediately following the assessor training, the new assessor becomes part of a task force for reviewing and evaluating the Assessment Center process and its effectiveness in the department.

Six managers who had been assessed and trained received regular counseling sessions, the results of which were significant behavior and attitude changes observed by their immediate supervisors.

Special leadership skills courses have been offered for those candidates who were rated below average in group and individual leadership skills. Feedback from participants is positive in changing ways to supervise subordinates and requesting the same program for foremen.

Involvement of the senior managers with the candidates in the feedback sessions models behavioral skills that the candidates need to view, as well as experience personally, in order to be effective in the development of subordinates.

The center also provides the environment for effective learning that focuses on the participants’ responsibilities and opportunities within the organization. The experience of the Assess-

<table>
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<th>Category</th>
<th>Dimension</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Decision making</td>
<td>Analysis</td>
<td>Relating and comparing data from different sources, identifying issues, securing relevant information, and identifying relationships</td>
</tr>
<tr>
<td></td>
<td>Judgment</td>
<td>Developing alternative courses of action and making decisions based on logical assumptions that reflect factual information</td>
</tr>
<tr>
<td></td>
<td>Decisiveness</td>
<td>Readiness to make decisions, render judgments, take action, commit oneself</td>
</tr>
<tr>
<td>Management</td>
<td>Planning and organizing</td>
<td>Establishing a course of action for self and others to accomplish a specific goal; planning proper assignments of personnel and appropriate allocation of resources</td>
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<tr>
<td></td>
<td>Delegation</td>
<td>Using subordinates effectively. Allocating decision making and other responsibilities to the appropriate subordinates</td>
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<td></td>
<td>Control</td>
<td>Establishing procedures to monitor or regulate processes, tasks, or activities of subordinates and job activities and responsibilities. Taking action to monitor the results of delegated assignments or projects</td>
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<tr>
<td></td>
<td>Development of subordinates</td>
<td>Developing the skills and competencies of subordinates through training and development activities related to current and future jobs</td>
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<tr>
<td>Interpersonal</td>
<td>Individual leadership</td>
<td>Utilization of appropriate interpersonal styles and methods in guiding individuals (subordinates, peers, superiors) toward task accomplishment.</td>
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<tr>
<td></td>
<td>Group leadership</td>
<td>Utilization of appropriate interpersonal styles and methods in guiding groups toward task accomplishment.</td>
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<td></td>
<td>Sensitivity</td>
<td>Actions that indicate a consideration for the feelings and needs of others</td>
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<tr>
<td>Communications</td>
<td>Oral communication</td>
<td>Effective expression in individual or group situations (includes gestures and nonverbal communication)</td>
</tr>
<tr>
<td></td>
<td>Written communication</td>
<td>Clear expression of ideas in writing (includes grammar, organization, and structure)</td>
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</table>
ment Center results in the participants personal awareness of their performance during the exercise, which carries over to their present job. Participants are also influenced by the feedback session in which their managers can attest to the results and enter into a dialogue responsive to the participant by discussing those job behaviors that need attention, as well as those rated well above adequate.

In a developmental center, feedback about performance is a significant factor that does not occur in the usual classroom environment of the ordinary training program. The knowledge acquired through the center, because of its specific focus on job behaviors and the discussion of those behaviors throughout the exercises, is important for the participant because it carries back to the job, as well as serves as preparation for future promotions. The exercises in the center are reality based in relation to the future job and the organization. Thus candidates acquire information in a hands-on experience from many vantage points and are provided the opportunity to discover what they might otherwise overlook with regard to managerial skills.

ADVANTAGES TO THE ORGANIZATION

An integral feature of the center is the use of senior managers who serve as assessors, conduct the center, and make recommendations regarding the management potential and developmental needs of the participants. They are prepared for this role in a 5-day training program where they learn to observe, identify, classify, and rate managerial behaviors.

The Assessment Center is a diagnostic instrument. Higher management and immediate supervisors recommend and provide opportunities for development, and the candidates who have been assessed are then responsible for contributing their energies to the process of development. The entire effort is an involvement of managers from different levels of responsibility dedicating themselves and the organization to cultivating and supporting more effective management through the development of necessary skills.

The Assessment Center methodology has been shown to be an excellent career development tool. There now exists an established formal procedure that places managers in realistic simulations of situations that occur on the job. In order to handle the simulations effectively, candidates must demonstrate the extent to which they can display the behaviors and skills essential to the incumbent’s position. Department managers who have participated in assessor training declared it to be one of the most effective executive development programs they have experienced, and it is now under consideration as a training program for professional engineers who are not yet in the management ranks.

Results from a survey of attitudes toward the Assessment Center experience show that of the managers who have participated in a center, 82 percent indicate it was a very positive experience, 69 percent use the results of the center experience in their jobs, and 53 percent are relating to subordinates’ problems on the job with Assessment Center data.

As a training needs analysis, 77 percent indicated the Assessment Center is an effective method for identifying specific needs, and 69 percent have been more interested in increasing their own skills.

Of the 62 senior managers trained as assessors, each has served at least once and many, two or three times. By keeping the requirements for participation to no more than once a year, more commitment is gained and a diversity of assessors can be drawn from the large number trained. Also, attending to everyone’s own work and time constraints provides the support of high-level management to the concept and process of the Assessment Center, which assists in creating an environment for the participants to similarly view the experience.

In a recent interview with two of the seven senior directors in the department concerning the entire spectrum of human resources management, the following comments were made about the department’s Assessment Center.

The Assessment Center has been a fantastic experience for us. Most specifically because it offers the opportunity for self-appraisal. There is value in assessor training even more than the Assessment Center and I personally experienced the benefits of that. It is important to be with a group of very sharp people and taking the time to share judgments about the capabilities and experiences of those people. The chance to dialogue with other managers, the opportunity that I had to sit down with my own people led me to discover that when I first interviewed everybody as the new person, I had made some mistakes and then these points were reinforced by the Assessment Center. For example, problems of control or planning and organizing that I noticed in the first interview showed up in the Assessment Center so my perceptions were confirmed.

The second director commented:

I’m a strong proponent of the Assessment Center. I was very impressed with the results and the correspondence of the results to my own notions about people’s strengths and weaknesses to the extent that I knew the people who were being assessed. So I think it’s a very good barometer of developmental needs and managerial potential and I’d like to see it become a more pervasive tool. I think it is a good developmental needs tool and that to wait until people have already achieved the management ranks and then disclose areas where their skills are wanting is really waiting too long. I’d like to see us make a commitment to expand Assessment Centers that would extend at least down to the principal professional level if not lower. I realize that I’m talking about a rather substantial commitment, but there’s no one human resource development tool that I’ve become aware of that this Department has availed itself of that I think is more valuable than the Assessment Centers.

CONCLUSION

In its brief history in the New Jersey Department of Transportation, the Assessment Center Method has proven itself significantly enough to become institutionalized as an ongoing budgeted function serving many needs for continually increasing the skills of managers. The initial effort and results indicate that the Assessment Center Method can be used as a structured diagnostic instrument to determine skill weaknesses and strengths at different levels such as entry-level professional, or first-line supervisor. This effort is recommended as a useful and revealing evaluative technique for determining training needs of professional engineers in a transportation agency.