The effectiveness of a 1-day performance-focused human resource (HR) development workshop that was conducted in 21 sessions in cities throughout North America in March-September 1996 was monitored by an electronic survey sent to all 506 participants 7 days after the workshop. Of those participants, 221 (43%) completed the survey, which sought information regarding the following: participant demographics; the workshop's support activities; and activities in the workshop's four targeted performance areas (increase proficiency in using the career development model and online HR decision-making tool; increase ability to work effectively to support other HR functional specialities; build awareness of patterns of thought/behavior/results involved in making/communicating HR decisions with coworkers/clients; and proactively share learning/improvement ideas with others). At least 77% of respondents considered the workshop effective in supporting at least moderate growth in each of the four targeted performance areas. The eight primary workshop activities and four support activities were considered at least moderately well accomplished by 80% and 65% of respondents, respectively. The technique of using electronic surveys tied to performance change in the workshop design was concluded to be a cost-effective and time-effective research procedure that both documented the workshop's effectiveness and provided ongoing feedback for continuous improvement. (MN)
This study focused on measuring the effectiveness of an Integrative Learning workshop provided to 506 human resource professionals in Andersen Consulting’s North American practice area. This paper documents the effectiveness of these workshop learning activities and growth in targeted performance. Implications are drawn for future performance-focused education efforts at Andersen Consulting and for a “3-months after” follow-up study. Keywords: Performance-focused Learning, Performance Change, Integrative Learning, Reflective Learning, Workplace Learning, Research Methods, Research Results

Andersen Consulting (AC) has pioneered the development and use of performance-focused human resource development programs with its global consulting workforce since early 1993 (Nowakowski, 1994; Montgomery, 1996a). In Fiscal Year 1996 (September, 1995 through August, 1996), Andersen Consulting Education (ACE), Andersen Consulting’s internally focused professional development organization, invested more than $17,100,000 in development and delivery of performance-focused human resource development programs for AC’s global workforce of 41,000 consultants (Montgomery, 1996b). Measuring the performance return on this investment is recognized as a challenge and a growing business imperative. Research data documenting the effectiveness of these programs has not kept pace with the demand for and development of these programs. In early 1996 AC began collecting feedback survey data from participants in these programs using electronic media. This use of technology has made gathering research data more cost effective and practical.

This study focused on the reported growth in targeted performance and on the evaluation of the effectiveness of the learning activities of one 8-hour, Andersen Consulting performance-focused workshop, the “Applied CDM Learning Day,” offered to 506 human resource (HR) professionals in AC’s North American practice area between March and September, 1996. This workshop was developed using the Integrative Learning approach to performance-focused design (Montgomery, 1996c). Feedback gathered during this study was used in a “reflection-in-action” process (Montgomery, 1992) to improve the effectiveness of the workshop approximately mid-way through the 21 offerings of the workshop. The results of this study were used to launch a “3-months after” follow-up study reported elsewhere (Montgomery, 1996e).

This study represents innovation in human resource development practice at Andersen Consulting in five key areas:

- Use of timed electronic surveys to collect data regarding targeted performance change after the workshop was completed.
- Use of surveys to collect data regarding targeted performance change designed into the human resource development workshop and feedback regarding the extent to which workshop activities supported that change.
- Integration of targeted performance change evaluation as part of the design of the human resource development learning experience.

This only represents a portion of the financial investment made by AC in developing its global consultants. AC’s gross income for the Fiscal Year was in excess of $4 billion and 6.5% was invested in the continuing development of its workforce (Montgomery, 1996b).
Monitoring the Effectiveness of a Performance-focused Human Resource Development Workshop at Andersen Consulting Seven Days After the Workshop

- Evaluation of the effectiveness of an Integrative Learning workshop conducted primarily by Andersen Consulting human resource professionals at multiple locations throughout the Americas.
- "Reflection-in-action" use of research data to improve/enhance the effectiveness of the workshops remaining to be conducted.

Background

In 1995, in order to stay ahead of the growing demand for deeply skilled consulting professionals to meet the needs of its global clients, Andersen Consulting (AC) introduced a competency-based framework for recruiting, staffing, and developing its global workforce of consulting professionals (1996b). The Career Development Model (CDM) (Montgomery, 1996d) was first introduced in AC's North American practice area in a series of information-focused sessions provided to human resource professionals supporting this workforce. It soon became clear that these professionals needed additional support to learn to work with this model in their daily routines. To meet these needs, a performance-focused workshop was developed in December, 1995, using a systems approach to Integrative Learning design (Montgomery, 1996d). The conceptual design for this workshop was tested in February, 1996, and the workshop was piloted in March with very minor changes. The design for this workshop was introduced at the 1996 Conference of the Academy of Human Resource Development (Montgomery, 1996d).

After completion of the workshop, learners were expected to have grown in four areas of targeted performance:
- Become more proficient in using the Career Development Model and on-line tool (C-Map Writer) in making HR decisions regarding staffing, recruiting, and training.
- Increase ability to work effectively in supporting other HR functional specialties.
- Build awareness of patterns of thought, behavior, and results involved in making and communicating HR decisions with coworkers and clients.
- Identify areas for continuing development and growth as a community of HR professionals.

Research Questions:

1. How much growth do learners experience upon completion of the workshop with regard to the targeted performance areas of the workshop?
2. What activities in the workshop do learners see as contributing to the targeted performance change?
3. How well will participants respond to the innovation of electronic survey feedback collected after completion of the human resource development program?

Methodology:

The "Applied CDM Learning Day" was conducted in 21 sessions at cities throughout North America during the period March through September, 1996. The number of participants in each session ranged from 11 to 46. Each of the 506 participants was sent an electronic survey seven days after the workshop and three months after the workshop. 221 participants (43%) responded.

2 While total of 506 human resource professionals participated in the workshop. 92 participants participated in workshops conducted after the cut-off date for the "3-months after" surveys used in this study.
3 This represented an innovation for Andersen Consulting. Until 1996 programs were most frequently evaluated on the last day of the program and focused on participant satisfaction with...
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to the “7-days after” survey and 101 participants (20%) responded to the “3-months after” survey. Research questions one and two were addressed by the “7-days after” survey. The results of the “3-months after” survey are presented in a separate paper (Montgomery, 1996e).

The “7-days after” survey evolved slightly as the Applied CDM development team conducted these workshops. What had originally been identified as “target outcomes” (Montgomery, 1996d) became identified as primary learning activities. The true targeted performance change outcomes were originally identified as “process outcomes.” With this realization and the introduction of the Performance Change Curve (see Figure 1) (Montgomery, 1996e) during the time the workshop was being conducted, the “7-days after” survey went through two revisions. While each of the versions were very similar, the exact questions and responses were changed. 181 (36% of the 506 participants) responded using the original survey. Only the data collected from the original survey are reported in this paper. Data from the other two versions of the “7-days after” survey (used by 40 participants) are consistent with data collected from the original survey.

Survey Composition The “7-days after” survey contained 26 questions divided into four sections: Questions 1 through 7 captured demographic information. Questions 8 through 16 addressed primary learning activities in the workshop. Questions 17 through 21 addressed support activities in the workshop. Questions 22 through 26 captured self-report data regarding growth in each of the four targeted performance areas. For all questions other than typing a response, keywords were identified beside radio-buttons. To select a response, the participant would point over the button and “click” the computer’s left “mouse” button. The choices were all made by keyword rather than by number. The Lotus Notes mail-in database was programmed to convert the selections to numerical responses. Data collected in the mail-in database was displayed in “views” matching the questions on the survey. Data displayed in these “views” was then exported into a Microsoft Excel spreadsheet where data analysis was conducted. (The data collection portion of the survey contained three comment questions. Data from comments are not included in this paper.)

Results

Targeted Performance Change
1. Become more proficient in using the Career Development Model (CDM) and on-line tool (C-Map Writer) in making human resource (HR) decisions regarding staffing, recruiting, and training.
2. Increase ability to work effectively in supporting other HR functional specialties.
3. Build awareness of patterns of thought, behavior, and results involved in making and communicating HR decisions with coworkers and clients.
4. Proactively share learning and improvement ideas with others to help in the development and growth of AC’s HR organization.

Survey Questions Focused on Targeted Performance Change: Summary Question: How would you assess your growth in the following areas? Possible Responses: Extensive (5); A lot (4); Moderate (3); A little (2); Not at all (1).

various elements of the program rather than on growth in targeted performance and contribution of elements of the program to performance change.

4 The “Performance Change Curve” was initially referred to as the “Personal Change Curve” and the “Learning Change Curve.”

5 These primary activities were referred to as “target outcomes” on the first version of the survey.
Monitoring the Effectiveness of a Performance-focused Human Resource Development Workshop at Andersen Consulting Seven Days After the Workshop

Table 1: Targeted Performance Change

<table>
<thead>
<tr>
<th>Perf. 1 Percent</th>
<th>Perf. 2 Percent</th>
<th>Perf. 3 Percent</th>
<th>Perf. 4 Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extensive (5)</td>
<td>3</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>A lot (4)</td>
<td>33</td>
<td>38</td>
<td>49</td>
</tr>
<tr>
<td>Moderate (3)</td>
<td>41</td>
<td>35</td>
<td>30</td>
</tr>
<tr>
<td>A little (2)</td>
<td>20</td>
<td>19</td>
<td>7</td>
</tr>
<tr>
<td>Not at all (1)</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Moderate or &gt;</td>
<td>77</td>
<td>78</td>
<td>91</td>
</tr>
<tr>
<td>Average</td>
<td>3.14</td>
<td>3.24</td>
<td>3.67</td>
</tr>
</tbody>
</table>

Primary Workshop Activities
1. Practice working with the Career Development Model (CDM) in staffing, recruiting, and training.
2. Practice working in cross-functional HR teams.
3. Make HR decisions in the context of the CDM.
4. Reflect on the impact of the CDM on HR decisions and activities.
5. Transfer knowledge to peers and share learning experiences.
6. Network with other HR professionals.
7. Identify action items for self, functional team, and organization.
8. Make a personal commitment to action items.

Survey Questions Focused on Primary Workshop Activities: Summary Question: How well did we (accomplish these learning activities)?
Possible Responses: Very much so (5); A lot (4); Moderately (3); A little (2); Not at all (1).

Table 2: Accomplishment of Primary Workshop Activities

<table>
<thead>
<tr>
<th>Activity 1 Percent</th>
<th>Activity 2 Percent</th>
<th>Activity 3 Percent</th>
<th>Activity 4 Percent</th>
<th>Activity 5 Percent</th>
<th>Activity 6 Percent</th>
<th>Activity 7 Percent</th>
<th>Activity 8 Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very much so (5)</td>
<td>19</td>
<td>34</td>
<td>14</td>
<td>23</td>
<td>31</td>
<td>29</td>
<td>13</td>
</tr>
<tr>
<td>A lot (4)</td>
<td>47</td>
<td>39</td>
<td>42</td>
<td>45</td>
<td>45</td>
<td>30</td>
<td>44</td>
</tr>
<tr>
<td>Moderate (3)</td>
<td>29</td>
<td>19</td>
<td>38</td>
<td>29</td>
<td>20</td>
<td>24</td>
<td>35</td>
</tr>
<tr>
<td>A little (2)</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>2</td>
<td>4</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Not at all (1)</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Moderate or &gt;</td>
<td>96</td>
<td>91</td>
<td>93</td>
<td>97</td>
<td>96</td>
<td>83</td>
<td>93</td>
</tr>
<tr>
<td>Average</td>
<td>3.81</td>
<td>4.01</td>
<td>3.63</td>
<td>3.9</td>
<td>4.03</td>
<td>3.74</td>
<td>3.64</td>
</tr>
</tbody>
</table>

Supporting Activities
1. Work with the Career Development Model (CDM) and an on-line tool (C-Map Writer) to respond to a staffing request for a Business Integration engagement.
2. Work with the CDM and on-line tool to create a skill-map for an experienced hire (someone with substantial prior work experience).
3. Work with the CDM, on-line tool, a Proficiency Development Plan, and staffing opportunities to counsel the experienced hire in developing proficiencies for career and engagement staffing.
4. Work with the CDM in counseling a recruit/new hire regarding career opportunities and skill tracks (consulting specialty tracks emphasizing deep skills in selected areas).

The original phrasing was "meet these target outcomes."
**Survey Questions Focused on Supporting Activities in the Workshop**: Summary

Question: How well did the following activities support the (primary activities)?

Possible Responses: Very much so (5); A lot (4); Moderately (3); A little (2); Not at all (1).

<table>
<thead>
<tr>
<th>Table 3: Effectiveness of Support Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
</tr>
<tr>
<td>Very much so (5)</td>
</tr>
<tr>
<td>A lot (4)</td>
</tr>
<tr>
<td>Moderate (3)</td>
</tr>
<tr>
<td>A little (2)</td>
</tr>
<tr>
<td>Not at all (1)</td>
</tr>
<tr>
<td>No Response</td>
</tr>
<tr>
<td>Moderate or &gt;</td>
</tr>
<tr>
<td>Average</td>
</tr>
</tbody>
</table>

Analysis:

**Targeted Performance Change**

Respondents reported moderate to extreme growth on the four targeted performance areas. Targeted Performance Area number one had the lowest number (140 respondents, 77%). Each of the other Targeted Performance Areas had more respondents reporting this degree of growth.

**Primary Learning Activities**

151 (80%) of the respondents reported accomplishing the “Networking with other HR professionals” primary learning activity at least moderately well. The other seven primary learning activities all had greater numbers of respondents rating accomplishment at least at the “moderately well” level.

**Supporting Activities**

117 (65%) of the respondents reported working with the CDM, a Proficiency Development Plan, on-line tools, and an experienced hire contributed to the accomplishment of the primary learning activities at least moderately well. The other three support activities all had greater numbers of respondents rating the contribution of those activities to the primary learning activities at least at the “moderately well” level.

**Conclusions**

Research Question 1: The “Applied CDM Learning Day” Workshop was effective in supporting at least moderate growth in each of the four targeted performance areas (endorsed by at least 77% of respondents.)

Research Question 2: The learners reported that the eight primary learning activities of the workshop were accomplished at least moderately well (endorsed by at least 80% of respondents) and that the four support activities added value to the primary activities (endorsed by at least 65% of respondents).

Research Question 3: The use of electronic surveys tied to targeted performance change in the workshop design resulted in a cost effective and time-effective research procedure that both documented the effectiveness of this human resource development program and provided on-going feedback for continuous improvement. The response rate for this “seven-days after” survey was 44 percent (221 respondents out of 506 participants). That level of response provided both additional follow-up opportunities and a more solid base for developers to use to make adjustments to the program.

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7 “target outcomes” in the original phrasing.
Monitoring the Effectiveness of a Performance-focused Human Resource Development Workshop at Andersen Consulting Seven Days After the Workshop

**Figure 1**

Performance Change Curve

**Implications**

*Research Questions for “3-months after” survey:*

1. Can participants use the Performance Change Curve (see Figure 1) as a common framework by which to measure targeted performance change?
2. Will the data regarding growth in targeted performance immediately after the workshop be consistent with the results of the “7-days after” survey?
3. How much growth on the Performance Change Curve did learners experience in the three months following the workshop?
4. Is there a correlation between frequency of personal use of the CDM and learning level on the Performance Change Curve in CDM-related targeted performance over the three months following the workshop?
5. What support activities have the learners experienced with regard to working with the CDM in the three months following the workshop?

*For Workshop Design at Andersen Consulting*

1. The Integrative Learning workshop design process (Montgomery, 1996c) is effective in designing a workshop that results in growth in targeted areas for performance change. Key to the performance change outcomes are the primary and supporting learning activities designed into the workshop. These activities are designed around target outcomes for learning and performance.
2. Growth in targeted performance areas is an useful measurement of the effectiveness of performance-focused workshops.
3. The Performance Change Curve may be useful as a measurement standard of growth for multiple areas of performance.
4. The Performance Change Curve may also serve as a common benchmark for sponsor expectations regarding target performance outcomes and for participant/supervisor feedback regarding actual achievement of target performance outcomes.
5. Electronic follow-up surveys are an effective tool for collecting feedback that Andersen Consulting professionals will use.
6. Evaluation surveys are an integral part of the workshop design process and need to focus on targeted performance outcomes and workshop elements supporting these outcomes.
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How this Research Contributes to New Knowledge in HRD:

This research documents the effectiveness of a performance-focused human resources development workshop developed by and for Andersen Consulting's HR professionals. This builds on the work introduced at the 1996 Conference of AHRD and documents the effectiveness of electronic surveys as a medium for data collection. The Performance Change Curve, based on the Integrative Learning Model and other research (Montgomery, 1992; Montgomery, 1996a; 1996c, 1996d; Montgomery, 1989) was introduced to workshop participants beginning in June as a benchmark for self-report feedback regarding performance change. This is the first introduction of the Performance Change Curve, based on a meta-model for human learning (Montgomery, 1992, 1996c, 1996d) into HRD research literature. The Integrative Learning design process is an innovation introduced in early 1996. This research is the first documentation of the effectiveness of that design process.

References


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