A Comparison of the Leadership Behaviors of Instructional Designers in Higher Education and Industry

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Abstract. Instructional developers in industry and in higher education fill a number of leadership roles. Leadership is defined as the process of influencing the activities of an individual or group in an effort to accomplish situational goals. Though little research has been done, the literature suggests that the leadership behaviors of developers in higher education and in industry are quite different. Leadership behaviors of developers in these two settings were explored in terms of task and relationship behavior. The results indicate that differences in leadership may in fact exist, although not to the extent indicated in the literature.

Introduction

In years past, the majority of instructional developers were employed by institutions of higher education. This was due in part to the infusion of federal funds through programs such as the Fund for the Improvement of Post Secondary Education (FIPSE), which funded the creation of a number of instructional development centers in the early 1970s. In recent years, as federal funds appropriated for the improvement of instruction have all but stopped, the growth of instructional development efforts in higher education has slowed.

At the same time, declines in work productivity have encouraged industry to invest in employee training. While this training may benefit employees in enhancing their personal growth, it is most often designed to improve the technical competence of the individual. The task of developing this training has been assumed by instructional developers, or training developers as they are referred to in industry (Corrigan, 1980, p. 328).

In recent years, a number of studies have compared the competencies expected of developers functioning in these two settings. Although competencies of developers in higher education and in industry appear to be quite similar (Alexander & Yelon, 1972; Denden-Parker, 1981; Pinto & Walker, 1978), differences may exist in the way these individuals work with others.

Developer-client relationship building is frequently emphasized when instructional development is undertaken in an educational setting (Alexander & Yelon, 1972; Durzo, Diamond, & Doughty, 1979). In contrast, the highly competitive nature of industry often dictates that development efforts center on finding expeditious solutions to specific problems (Brancomb & Gilmore, 1975; Corrigan, 1980; Schwaller, 1980).

Whether the focus is on task accomplishment, relationship building, or a combination of both, developers in higher education and industry fill a leadership function, with leadership defined as the "process of influencing the activities of an individual or groups in efforts towards accomplishing goals in a given situation" (Hersey & Blanchard, 1972, p. 68). The leader's facilitative responsibility, such as in the identification of group needs, the establishment of objectives, and the development of solution strategies, is a recurring theme (Bellows, 1959; Hersey & Blanchard, 1976; Kozin & O'Donnell, 1968; Tannenbaum, Weshler, & Massarik, 1961).

Other leadership functions include "maximizing the utilization of group members' abilities" (Schutz, 1961) and maintaining group cohesiveness (Stogdill, 1974).

Hersey and Blanchard (1977) suggest that in any leadership situation, a leader will display both task and relationship behavior, defined as follows:

Task Behavior. The extent to which leaders are likely to organize and define the roles of the members of their group to explain what activities each is to do and when, where, and how tasks are to be accomplished.

Relationship Behavior. The extent to which leaders are likely to maintain personal relationships between themselves and members of their group by providing socio-emotional support, "psychological strokes," and facilitating behavior. (pp. 103-104)

The authors hypothesize that task and relationship behavior are separate and distinct dimensions of leader behavior and can be plotted on two separate axes as opposed to a single continuum, in which task and relationship behavior are looked upon as separate and distinct phenomena. From this perspective, an individual simultaneously exhibits high or low relationship behavior in a given leadership situation. As a result, four task/relationship behavior combinations are possible (see Figure 1).

The suggestion that situational factors play a key role in the leadership process is emphasized by Korman (1966), who concludes that task and relationship behavior alone have little predictive validity in identifying effective leader behavior. He states that validity might be improved through the concurrent exploration of task behavior, relationship behavior, and situational variables.

Extending the earlier work of Reddin (1967) and building on the work of Likert (1961, 1967), Hersey, Blanchard, and Hambleton (1977) have clustered situational variables under the heading of "effectiveness." From this perspective, "effectiveness" is dependent on a leader's ability to accurately assess the maturity of an individual or a group, with maturi-
ty defined as the "willingness and ability of a person to take responsibility for directing his or her own behavior" (p. 4). According to these authors, the maturity of an individual in relation to a specific job consists of two dimensions: Psychological maturity is related to the willingness or motivation to do something. Individuals who have high psychological maturity in a particular area of responsibility think that responsibility is important and have self-confidence. They do not need extensive encouragement to get them to do things in that area.

Job maturity is related to the ability or competence to do something. Individuals who have high job maturity in a particular area of their work have the knowledge, ability, and experience to do tasks in that aspect of their job without the need for direction from others. (p. 4)

This approach to the study of leader behavior, labeled Situational Leadership Theory, suggests that the selection of an appropriate leadership behavior is dependent on the psychological maturity and the job maturity of an individual or group in a given situation. From this perspective, an individual or group possessing a great deal of psychological and job maturity requires a low task/low relationship behavior on the part of the leader. In contrast, an individual or group with little psychological and job maturity requires leadership behavior which is high on both relationship and task dimensions. Still other individuals/groups may have a high degree of psychological maturity, but little job maturity. Such an individual/group would require little personal nurturing, but a great deal of guidance in terms of the given task. As such, the developer's utilization of high task/low relationship leadership behavior with these individuals would be appropriate.

Despite the interrelationships which link leadership and the instructional development process, there is little known about the comparative leadership behavior of developers in higher education and industry. As a result, university-level instructional development programs are now training developers to function as leaders in higher education and industrial settings without a clear understanding of the leadership behavior of those currently working in these two settings.

This study was undertaken for the purpose of determining if there were any differences in developers' perceptions of their leadership behaviors. The specific leadership behaviors include task and relationship behaviors and leadership effectiveness as measured on a self-report leadership scale.

**Methods**

**Materials**

The Leadership Effectiveness and Adaptability Description (LEAD-Self) instrument developed at the Ohio State University Center for Leadership Studies (Hersey & Blanchard, 1977) was used to collect developers' perceptions of their leadership behaviors in different hypothetical situations. The LEAD-Self includes 12 hypothetical leadership situations. For each situation, four alternatives are presented. Respondents are asked to select the alternative which is most representative of their behavior in each situation.

Five scores are computed from the responses to the 12 leadership situations. Four of the scores reflect the number of times the respondent used each of the four task/relationship leadership behaviors (i.e., high task/low relationship, high task/high relationship, low task/low relationship, low task/high relationship). An individual's score on each of the four leadership behavior dimensions can range from 0 to 12. The fifth score reflects the respondent's situational "effectiveness" in selecting the leadership behavior strategy most appropriate to the psychological and job maturity of the group represented in each leadership situation. Scores on the "effectiveness" dimension can range from -24 (least effective) to +24 (most effective), ranging from -2 to +2 for each of the 12 situations.

**Procedures**

A stratified random sample was used to select 60 respondents from each of two sources: (1) instructional development divisions in higher education and (2) training departments in industry. A total sample of 120 was selected for the study. Seventy-five percent (N = 45) of the profiles sent to those in higher education and seventy percent (70%) (N = 42) sent to those in industry were completed and returned.

The means and standard deviations for the two groups in relation to the five leadership variables are presented in Table 1.

**Results**

Data were analyzed using one-way analysis of variance (ANOVA) with "setting" (i.e., higher education, industry) as the independent variable. Leadership "effectiveness" and the four task/relationship leadership behavior combinations (i.e., high task/low relationship, high task/high relationship, low task/low relationship, low task/high relationship) were the dependent variables. The ANOVA was used to determine if there were significant differences among the five leadership behaviors reported by developers in industry and in higher education. In addition, omega square values (ω²) were computed for the F-ratio resulting from each of the analyses of variance.

The omega square value is a function of the significance of group differences and tells the researcher the proportion of variance accounted for by an individual variable or interaction. A small omega square value, for example, indicates that the difference in group means is small when compared to within-group variability. Although the variable may still be significant from a statistical perspective, its practical significance is minimal.

Developers in industry reported significantly more high task/high relationship behavior than developers in higher education, F (1, 82) = 5.91, p less than .05, although only 5.5% of the shared variance was accounted for by this variable (see Table 2).

Developers in higher education reported significantly more low task/high relationship behavior than developers in industry, F (1, 82) = 6.93, p less than .05, with 6.6% of the shared variance accounted for by this variable (see Table 3).

There was no significant difference in the mean number of times that high task/low relationship leadership behavior was reported in the 12 situations by developers in industry and higher education, F (1, 82) = 2.72.

The number of low task/low relationship behaviors used by developers in the
two settings was not significantly different, \( F(1,82) = 1.64 \).

As previously described, the respondent's "effectiveness" is directly related to the appropriateness of the selected leadership strategies to specific situational needs. The setting by "effectiveness" ANOVA indicates no significant difference between the leadership "effectiveness" scores of developers in the two settings, \( F(1,82) = .47 \).

**Discussion**

In terms of the 12 hypothetical leadership situations presented in the LEADS framework, results indicate that developers in industry reported significantly more high task behaviors and significantly fewer low task behaviors than developers in higher education. The findings are in keeping with the literature suggesting that developers in educational settings emphasize relationship building as a major component of their dealings with clients (Alexander & Yelon, 1972; Durzo et al., 1979), while those in industry settings emphasize the need for task accomplishment and increased productivity (Branscomb & Gilmore, 1975; Schwaller, 1980). This difference in emphasis is summarized by Stolovitch (1981), who states that although the basic process of instructional development is quite similar, there are major differences between the worlds of the educational and industrial developer. Whereas the developer in education is concerned with learning and with individual growth of those involved in the development process, industry views development as a costly process and expects a significant return on investment either in terms of dollar savings or increased revenue.

Despite these statistically significant differences in task-oriented leader behavior, the relatively small omega square values reported in each ANOVA indicate that developers' reports of their leadership behaviors in these two settings are quite similar. True, developers in this sample from industry and higher education did have statistically significant differences on two of four task/relationship leadership behavior dimensions, but to say that these differences are extreme is to oversimplify the concept of leadership behavior in the two settings under study.

In terms of situational "effectiveness," there was not a significant difference in the leadership behaviors of developers in the two settings. This finding is not surprising in that the research literature did not indicate that developers in one setting are more effective than those in other settings.

As a result of this study, two conclusions may be drawn. One relates to the study of leadership behavior in general, the other specifically to the comparative nature of instructional development when conducted in higher education and industry.

First, although statistically significant on two of four task/relationship dimensions, a total of only 14.8% of the shared variance of developers in the two settings was accounted for. This suggests that either the leadership behavior of developers in industry and higher education is really quite similar, or that the data collection instrument used in this study is overly restrictive. The author contends that the two-continuum approach to the analysis of leadership behavior as used in this study is a significant improvement over the linear, single-continuum approaches often used in leader behavior research. Nevertheless, the results reported here suggest a need to further dissemble task and relationship behavior in an effort to further define the individual components of these two dimensions.

In terms of the second conclusion, for a number of years researchers have been examining the competencies required of developers in higher education and industry (Alexander & Yelon, 1972; Deden-Parker, 1983; Pinto & Walker, 1978) and comparing the two work environments (Corrigan, 1980; Schwaller, 1980). These studies, as well as others, indicate that although differences may exist, the functional gap between instructional development in these two settings may not be as great as once thought.

### Table 1

<table>
<thead>
<tr>
<th>Leadership Behaviors</th>
<th>Setting</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. High task/low relationship behavior*</td>
<td>Industry</td>
<td>1.32</td>
<td>1.25</td>
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<tr>
<td></td>
<td>Higher Ed.</td>
<td>.91</td>
<td>1.02</td>
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<tr>
<td>2. High task/high relationship behavior*</td>
<td>Industry</td>
<td>6.37</td>
<td>1.89</td>
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<tr>
<td></td>
<td>Higher Ed.</td>
<td>5.33</td>
<td>2.02</td>
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<tr>
<td>3. Low task/high relationship behavior*</td>
<td>Industry</td>
<td>3.80</td>
<td>1.96</td>
</tr>
<tr>
<td></td>
<td>Higher Ed.</td>
<td>5.00</td>
<td>2.18</td>
</tr>
<tr>
<td>4. Low task/low relationship behavior*</td>
<td>Industry</td>
<td>.51</td>
<td>.75</td>
</tr>
<tr>
<td></td>
<td>Higher Ed.</td>
<td>.74</td>
<td>.90</td>
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<tr>
<td>5. Situational &quot;effectiveness&quot;***</td>
<td>Industry</td>
<td>10.51</td>
<td>3.80</td>
</tr>
<tr>
<td></td>
<td>Higher Ed.</td>
<td>11.09</td>
<td>3.99</td>
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</table>

*Possible score of 12.

**Possible score of 24.

### Table 2

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>( \omega^2 )</th>
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<tbody>
<tr>
<td>Between Groups</td>
<td>22.71</td>
<td>1</td>
<td>22.71</td>
<td>5.91*</td>
<td>.005</td>
</tr>
<tr>
<td>Within Groups</td>
<td>314.95</td>
<td>82</td>
<td>3.84</td>
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<td></td>
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</table>

* \( p < .05 \)

### Table 3

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>( \omega^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>29.98</td>
<td>1</td>
<td>29.98</td>
<td>6.93*</td>
<td>.006</td>
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<tr>
<td>Within Groups</td>
<td>354.44</td>
<td>82</td>
<td>4.32</td>
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</table>

* \( p < .05 \)
While we have developed a clearer picture of the specific competencies required of developers in these two settings, an understanding of the social/interpersonal component of the development process, of which leadership is but one important dimension, is more elusive. By gaining an increased awareness of leadership behavior and other social/task dimensions of the development process, instructional developers will be better prepared to make instructional development a viable and worthwhile activity, whether the context is industry or higher education.

References


