In recent years, many studies have been conducted and articles published on the subject of leadership. Examples of these efforts can be found in most academic fields. Historically, these efforts have focused on the prevailing leadership theory being professed at that time. However, today there is agreement that leadership is a complex construct that goes beyond personal characteristics and abilities (Moss & Liang, 1990). The consensus of the leadership research suggests that quality leadership is extremely important to the success of an organization.

Several factors contribute to successful leadership. Crosby (1994) provided a description of the duties of a leader and identified four main absolutes of leadership: (a) integrity, (b) information, (c) innovation, and (d) decisiveness. In the book *On Becoming a Leader*, Bennis (1989) stressed that although leaders vary in many areas, they seem to possess the following characteristics: (a) a guiding vision, (b) a passion for what they are doing, (c) personal integrity, (d) trust of those they lead, (e) a deep curiosity, and (f) daring. In addition, effective leaders are supportive, goal-oriented, intelligent, self-confident, and energetic (Joiner, 1987).

Research conducted specifically on leadership in vocational education has resulted in the identification of leadership attributes necessary for vocational leaders (Moss & Liang, 1990). Subsequent research efforts were taken to refine and validate these leadership attributes (Moss & Johansen, 1991). These efforts by Moss et al. have resulted in the development of the following list of 37 attributes that appear to provide a valid descriptor of leadership:

- accept responsibility
- accountable
- achievement oriented
- adaptable, open to change
- appropriate use of leadership styles
- assertive/initiating
- beliefs appropriate to the group
- coaching
- committed to common good
- communication
- confident/self-accepting
- conflict management
- courageous, risk-taker
- delegating
- decision-making
- dependable/reliable
- emotionally balanced
- energetic with stamina
- enthusiastic/optimistic
- ethical
- information gathering & management
- insightful
- intelligent/practical judgment
- motivating others
- organizing
- persistent
- personal integrity
- planning
- problem-solving
- networking
- sensitivity/respect
- stress management
- tolerant of ambiguity/complexity
- tolerant of frustration
- visionary

Leadership in higher education was examined by Tack (1991). A result of the study was the compilation of the following list of essential qualities required of present and future higher education leaders:

1. A set of clear, positive, and rationally defensible values that they understand and on which they rely when making decisions.
2. The courage to focus on quality in everything they do, from the vision articulated to the rewards given to faculty and staff for meritorious performance.
3. The ability and willingness to take calculated risks in order to capitalize on new opportunities.
4. The ability and willingness to balance the competing and often consuming demands of their work and personal lives.
5. The ability to balance the need for extensive participation and input against the requirement to keep the organization on course and committed to its future plans.
6. The ability and willingness to be a motivational specialist.
7. The ability to factor time into the decision-making process more carefully than has been done in the past.

Leadership in most departments of industrial technology/technology education has traditionally been provided by the department executive officer (DEO). Throughout the history of industrial technology/technology education, strong leaders such as Warner, London, Maley, DeVore, Lux, Bensen, Householder, and others (too numerous to mention) have successfully led departments. Just as the leaders from the past were able to adapt to the demands of their time, future leaders will need
to understand the processes, and carefully assess each situation and make decisions that will move the profession forward. Therefore, the selection of a new DEO is one of the most important decisions that a faculty must make.

Selecting a leader of a department is a complex process. Within this process there are many factors, among which is the identification of the selection criteria to be used. An earlier study sought to identify the criteria deans use to screen and select DEOs for departments of industrial technology/technology education (Paige & Wolansky, 1991). The results indicated that deans place the greatest emphasis on the criteria of creative ability, scholarly ability, grantsmanship ability, and fiscal management.

Another group of people who actively participate in the selection process is the faculty. In many cases, faculty input in the selection process for a DEO is considered to be paramount for what would appear to be obvious reasons, such as an ability to work with colleagues within the department, research interests that relate to the departmental mission, ability to work with faculty to develop a shared vision, and so forth. However, the specific criteria that faculty perceive to be important and, therefore, are used by faculty to select their DEOs have not been identified in the literature.

One approach that might be taken to identify which criteria faculty consider important in the selection of a DEO is to solicit open-ended responses from faculty and then group these responses. Another method is to provide faculty members with a predetermined list of criteria and ask them to rate the importance of each item. This latter process of identifying the criteria and analyzing the level of importance could provide insight into the characteristics and abilities faculty perceive to be important and want their department leader to possess.

THE STUDY
The purpose of this research was to determine the criteria faculty members perceive to be most important currently and in the future for the process of selecting department executive officers of departments of industrial technology/technology education.

Population
The population for this study included all faculty members listed in the 1992-1993 Industrial Teacher Education Directory (Dennis, 1992). The sample consisted of a total of 462 faculty. Included in the sample were 128 professors, 119 associate professors, 135 assistant professors, and 80 instructors and lecturers. The sample for this study was limited to faculty from colleges and universities in the United States.

Two hundred sixty-three survey instruments were returned. This was an overall return rate of 57%. Three of the instruments were returned incomplete, resulting in a final usable return of 260 instruments or a rate of 56%.

Instrument
The instrument utilized for this study was identical to the one used in a previous study by Paige and Wolansky (1991). The instrument included items incorporating 13 criteria variables that may be considered in the selection process of department executive officers in industrial technology/technology education. The respondents were asked to rate each of the 13 selection criteria on a 7-point Likert-type scale as to its current and future importance. The criteria and corresponding descriptors are listed as follows:

1. Creative ability
   Ability to generate ideas and solve problems.
2. Human relations ability
   Inspires confidence and gets along well with others; sensitivity to women and minority issues.
3. Leadership ability
   Capacity to influence others to achieve departmental, college, institutional, and faculty goals.
4. Professional ability
   Demonstrated participation in professional organizations and service activities at local, state, national, and international levels.
5. Research ability
   Demonstrated capacity in the use of analytical and statistical design tools.
6. Scholarship ability
   Demonstrated performance and achievement in publications, advanced study, and scholarly recognitions.
7. Teaching ability
   Demonstrated superior performance in classroom and laboratory teaching assignments.
8. Curriculum development ability
   Development of mission, program, and evaluation of outcomes.
9. Health
   Stamina, energy, and general well-being meet the rigorous demands of administration.
10. Grantsmanship ability
    Record of ability to acquire project grants.
11. Fiscal management
    Demonstrated performance in budgetary matters and grants management.
12. Personality
    Personal characteristics are

Results and Implications

When the data were compiled and analyzed, a significant difference was found between the overall ratings for the selection criteria at the present time as compared to the ratings for the criteria in the future. The overall mean for the importance of the selection criteria in the future was significantly higher than the overall mean of the present (Table 1). This indicates that greater expectations and higher standards of excellence can be expected in the selection process for industrial technology/technology education department executive officers in the future.

In paired t tests, 12 of the 13 selection criteria demonstrated a significant increase in the rating between current and future importance at the .05 level. Only the criteria of scholarship failed to show statistical significance between current and future importance. Furthermore, significance was greater than the .001 level between current and future importance for the following 10 selection criteria:

- communication ability
- creative ability
- curriculum development ability
- fiscal management
- grantsmanship ability
- health
- human relations ability
- leadership ability
- personality
- research ability

When examining the means for the 13 selection criteria, it was interesting to observe which items faculty members perceived to be most important. The means for the 13 selection criteria are presented in Table 2 in descending order. Criteria which could be categorized as humanistic provided the five highest means and, therefore, could easily be considered most important from the perspective of this group of respondents. Conversely, criteria that received the lowest mean rating scores (research ability, grantsmanship ability, and scholarship ability) reflect attributes which are quite often measured on an individual basis. Historically, these same criteria have also been deemed among the most important criteria by many others who have participated in the selection process (Murray, Table 1

Comparison of Current and Future Ratings

<table>
<thead>
<tr>
<th>Variable</th>
<th>N Pairs</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Paired Differences Mean</th>
<th>Std. Dev.</th>
<th>t value</th>
<th>2-Tail Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Rating</td>
<td>71.44</td>
<td>9.32</td>
<td></td>
<td>-4.63</td>
<td>5.95</td>
<td>-12.30</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Future Rating</td>
<td>76.01</td>
<td>8.41</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2

Means of Present and Future Criteria Ranked in Descending Order

<table>
<thead>
<tr>
<th>Present</th>
<th>Mean</th>
<th>Future</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>6.30</td>
<td>Human relations</td>
<td>6.58</td>
</tr>
<tr>
<td>Human relations</td>
<td>6.13</td>
<td>Leadership</td>
<td>6.51</td>
</tr>
<tr>
<td>Communications</td>
<td>6.04</td>
<td>Communications</td>
<td>6.50</td>
</tr>
<tr>
<td>Personality</td>
<td>5.83</td>
<td>Creative ability</td>
<td>6.34</td>
</tr>
<tr>
<td>Creative ability</td>
<td>5.82</td>
<td>Fiscal management</td>
<td>6.12</td>
</tr>
<tr>
<td>Fiscal management</td>
<td>5.64</td>
<td>Personality</td>
<td>6.04</td>
</tr>
<tr>
<td>Curriculum</td>
<td>5.52</td>
<td>Curriculum</td>
<td>5.96</td>
</tr>
<tr>
<td>Health</td>
<td>5.42</td>
<td>Grantsmanship ability</td>
<td>5.79</td>
</tr>
<tr>
<td>Teaching ability</td>
<td>5.27</td>
<td>Health</td>
<td>5.75</td>
</tr>
<tr>
<td>Professional ability</td>
<td>5.18</td>
<td>Teaching ability</td>
<td>5.42</td>
</tr>
<tr>
<td>Scholarship ability</td>
<td>5.00</td>
<td>Professional ability</td>
<td>5.32</td>
</tr>
<tr>
<td>Grantsmanship ability</td>
<td>4.98</td>
<td>Scholarship ability</td>
<td>5.12</td>
</tr>
<tr>
<td>Research ability</td>
<td>4.46</td>
<td>Research ability</td>
<td>4.68</td>
</tr>
</tbody>
</table>

Note: N = 259.
Only two criteria were found to be significant when examining the data to see if any differences existed in the mean responses of instructors/lecturers, assistant professors, associate professors, and professors. Interestingly, both of these differences that emerged were found in the present selection criteria. The results of a one-way analysis of variance, presented in Table 3, indicate a difference between the groups. Further analysis using the Scheffe procedure revealed that assistant professors rated the criteria of creative ability significantly higher than the other three groups. This may be because assistant professors generally are somewhat newer to the profession and within one to five years past their terminal degree. They are also usually younger than associate or full professors, brimming with new ideas to try as well as being very excited about the future. Likewise, for the criteria of grantsmanship ability, the mean response of the instructor/lecturer group as revealed by the Scheffe procedure was significantly higher at the .05 level than those of the other three groups. This may result from the fact that, as a group, instructors/lecturers fill temporary positions that vary and are often dependent upon soft money for support. As such, grantsmanship ability is extremely important to their job security.

There were no significant differences found in the mean responses of the four categories of faculty regarding the importance of the selection criteria in the future. Thus, it may be concluded that the respondents held somewhat consistent beliefs about the selection criteria for the department executive officers in industrial technology/technology education in the future. It may also be concluded that faculty perceive that interpersonal skills will be considered most important in their deliberations during the selection process.

The findings of this survey have provided insights into the criteria that current faculty in industrial technology/technology education feel are important for selecting department executive officers. For the most part, regardless of rank, faculty hold similar views regarding which criteria are most important. It is also evident that faculty perceive the importance placed on the selection criteria will be increased in the future.

When examining any of the leadership position announcements in the field of industrial technology/technology education as well as other disciplines, one usually finds similar qualifications listed. Qualifications most often listed include teaching ability, research ability, grantsmanship/scholarship ability. As reported in this research, the most important criteria (as far as faculty are concerned) include ability to communicate, human relations ability, creative ability, and leadership. If, in fact, these humanistic characteristics are rated by faculty as being extremely important, then why are these important criteria missing in many position announcements? One would also ask: Is there congruence between what characteristics we say we want our leaders to possess and the criteria we use to select them?

The need for quality leadership in industrial technology/technology education is indeed clear. Communicating which criteria and leadership characteristics have been identified by the faculty as important to potential department executive officers is essential. Everyone involved in the selection process must work together constructively and communicate their expectations and desires, thus creating an effective nurturing environment that is filled with opportunities for the future success of our leaders, faculty, programs, and the discipline.

Table 3

<table>
<thead>
<tr>
<th>Group/Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>3</td>
<td>12.66</td>
<td>4.22</td>
<td>3.14</td>
<td>.0261*</td>
</tr>
<tr>
<td>Within groups</td>
<td>255</td>
<td>343.17</td>
<td>1.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>258</td>
<td>355.83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grantsmanship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>3</td>
<td>22.03</td>
<td>7.34</td>
<td>4.53</td>
<td>.0041*</td>
</tr>
<tr>
<td>Within groups</td>
<td>255</td>
<td>413.83</td>
<td>1.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>258</td>
<td>435.86</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at α = 0.05.
References