INFORMATION TO USERS

While the most advanced technology has been used to photograph and reproduce this manuscript, the quality of the reproduction is heavily dependent upon the quality of the material submitted. For example:

- Manuscript pages may have indistinct print. In such cases, the best available copy has been filmed.

- Manuscripts may not always be complete. In such cases, a note will indicate that it is not possible to obtain missing pages.

- Copyrighted material may have been removed from the manuscript. In such cases, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, and charts) are photographed by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each oversize page is also filmed as one exposure and is available, for an additional charge, as a standard 35mm slide or as a 17” x 23” black and white photographic print.

Most photographs reproduce acceptably on positive microfilm or microfiche but lack the clarity on xerographic copies made from the microfilm. For an additional charge, 35mm slides of 6” x 9” black and white photographic prints are available for any photographs or illustrations that cannot be reproduced satisfactorily by xerography.
Attitudes toward gifted and talented education in the preservice training programs for school principals by heads of programs for educational administration at selected universities

Slaymaker, Phillip Charles, Ph.D.

The Ohio State University, 1987

Copyright ©1987 by Slaymaker, Phillip Charles. All rights reserved.
**PLEASE NOTE:**

In all cases this material has been filmed in the best possible way from the available copy. Problems encountered with this document have been identified here with a check mark √.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Glossy photographs or pages ______</td>
</tr>
<tr>
<td>2.</td>
<td>Colored illustrations, paper or print ______</td>
</tr>
<tr>
<td>3.</td>
<td>Photographs with dark background ______</td>
</tr>
<tr>
<td>4.</td>
<td>Illustrations are poor copy ______</td>
</tr>
<tr>
<td>5.</td>
<td>Pages with black marks, not original copy √</td>
</tr>
<tr>
<td>6.</td>
<td>Print shows through as there is text on both sides of page ______</td>
</tr>
<tr>
<td>7.</td>
<td>Indistinct, broken or small print on several pages √</td>
</tr>
<tr>
<td>8.</td>
<td>Print exceeds margin requirements ______</td>
</tr>
<tr>
<td>9.</td>
<td>Tightly bound copy with print lost in spine ______</td>
</tr>
<tr>
<td>10.</td>
<td>Computer printout pages with indistinct print ______</td>
</tr>
<tr>
<td>11.</td>
<td>Page(s) ______ lacking when material received, and not available from school or author.</td>
</tr>
<tr>
<td>12.</td>
<td>Page(s) ______ seem to be missing in numbering only as text follows.</td>
</tr>
<tr>
<td>13.</td>
<td>Two pages numbered ______. Text follows.</td>
</tr>
<tr>
<td>14.</td>
<td>Curling and wrinkled pages ______</td>
</tr>
<tr>
<td>15.</td>
<td>Dissertation contains pages with print at a slant, filmed as received √</td>
</tr>
<tr>
<td>16.</td>
<td>Other____________________________________________________________________</td>
</tr>
</tbody>
</table>

__________________________________________________________
__________________________________________________________

University Microfilms International
ATTITUDES TOWARD GIFTED AND TALENTED EDUCATION IN
THE PRESERVICE TRAINING PROGRAMS FOR SCHOOL PRINCIPALS
BY HEADS OF PROGRAMS FOR EDUCATIONAL ADMINISTRATION
AT SELECTED UNIVERSITIES

DISSertation

Presented in Partial Fulfillment of the Requirements
for the Degree Doctor of Philosophy in the Graduate School of
The Ohio State University

by

Phillip C. Slaymaker, B.S., M.A., Ed.S.

The Ohio State University

1987

Dissertation Committee:
Dr. Raymond H. Swassing
Dr. Thomas M. Stephens
Dr. Walter G. Hack

Approved by:

Dr. Raymond H. Swassing Jr.
Adviser
Department of Human Services, Education
ACKNOWLEDGEMENTS

Those for whom this work was completed:
My wife, my mother, two sisters, and daughter (my glee)
My father, three brothers and son (my seed)
My guru, professors, and me.

Dedicated
to
Perseverance
VITA

October 19, 1932  Born - Fremont, Ohio

Education

1958  B.Sc., The Ohio State University
      Columbus, Ohio
      Major Field: Psychology
      Minor Field: Personnel Administration

1965  M.A., Bowling Green State University
      Bowling Green, Ohio
      Major Field: School Administration

1969  Ed.S., Bowling Green State University
      Bowling Green, Ohio
      Major Field: School Administration

Professional Experiences

1984-1987  Doctoral Student, Graduate Research Associate, The Ohio State University
           Columbus, Ohio

1980-1984  Superintendent of Schools
           Norwalk City Schools, Norwalk, Ohio

1975-1980  Superintendent of Schools,
           Wellington Exempted Village Schools
           Wellington, Ohio

1969-1975  Superintendent of Schools
           Hancock County Schools, Findlay, Ohio

1967-1969  Superintendent of Schools
           Green Springs Local Schools
           Green Springs, Ohio

1966-1967  Supervisor of Student Teaching,
           Graduate Student,
           Bowling Green State University
           Bowling Green, Ohio

1962-1966  Principal, Whittier Elementary School
           Fostoria City Schools, Fostoria, Ohio
1960-1962
Executive Head
Rollersville Local Schools
Sandusky County, Ohio

1958-1959
Teacher-Coach
Sandusky City Schools, Sandusky, Ohio

FIELDS OF STUDY

Educational Administration
Special Education Administration
Gifted and Talented Education Programs
Personnel Administration
Psychology
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>ACKNOWLEDGEMENTS</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>VITA</td>
<td>iii</td>
</tr>
<tr>
<td>FIELDS OF STUDY</td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xii</td>
</tr>
</tbody>
</table>

**CHAPTER**

1. **INTRODUCTION**
   
   - Statement of the Problem  
   - Need for the Study  
   - Purpose of the Study, Population, Objectives  
   - Significance of the Study  
   - Definition of Terms  

2. **REVIEW OF LITERATURE**

   - Historical Treatment of Gifted and Talented Programs  
   - Studies of Attitudes Toward Gifted and Talented Programs  
   - Historical Treatment of Contributing Authors to the Field of Educational Administration  
   - Studies of Attitudes Concerning Preparation Practices for School Principals  
   - Studies of Various Models of Preservice Preparation Programs for School Administrators  
   - Studies of Attitudes Toward the Skills and Knowledge Needed by School Principals  

3. **METHODOLOGY**

   - Nature and Design of the Study  
   - Population  
   - Instrumentation  
   - Validity  
   - Data Collection  
   - Reliability Measures  
   - Data Analysis  

v
IV. FINDINGS

Purpose of the Study

Variables

Objectives

1. Personal and Demographic Variables
   Position
   Gender
   Years of Experience in Present Position
   Years of Experience in Administration
   UCEA Membership
   UCEA Membership Experience
   Special Education Coursework Requirement
   Familiarity with the Biaggi Bill (HR 3623)
   Geographical distribution
   Overall Perceptions of Gifted and Talented Programs

2. Respondent Attitudes and Perceptions of Importance and Level of Acquisition of Skills and Knowledge

3. Respondent Perceptions of a Need to Change State Certification Standards for Principals

4. Respondent Attitudes Toward Inservice Workshop Attendance for Practicing Principals

5. Respondent Perceptions of Including Skills and Knowledge in Preparation Programs for Principals

6. Respondent Perceptions of the Level of Acquisition of Skills and Knowledge in Preservice Programs

7. Respondent Perceptions That Coursework Exists Which Addresses Skills and Knowledge

8. Respondent Perceptions of Appropriateness of Selected Training Models for Providing Principals with Skills and Knowledge
9. Implications of This Study for Federal Intervention in Gifted and Talented Education ....... 93
10. Relationships Between Respondent Perceptions of the Importance and Acquisition Level of Skills and Knowledge ................. 93
11. Relationships Between Independent and Dependent Variables ... 93

V. SUMMARY, IMPLICATIONS AND RECOMMENDATIONS

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization and Review</td>
<td>163</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>164</td>
</tr>
<tr>
<td>Objectives of the Study</td>
<td>164</td>
</tr>
<tr>
<td>Population</td>
<td>166</td>
</tr>
<tr>
<td>Research Design</td>
<td>167</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>167</td>
</tr>
<tr>
<td>Validity and Reliability of the Instrument</td>
<td>169</td>
</tr>
<tr>
<td>Data Collection</td>
<td>170</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>170</td>
</tr>
<tr>
<td>Summary and Implications of Findings</td>
<td>171</td>
</tr>
<tr>
<td>Conclusions</td>
<td>188</td>
</tr>
<tr>
<td>Recommendations</td>
<td>190</td>
</tr>
<tr>
<td>Summary</td>
<td>192</td>
</tr>
</tbody>
</table>

APPENDICES

A. Summary of Address by Dr. A. Harry Passow ........................................... 195
B. Correspondence ......................................................................................... 197
C. Panel of Experts ......................................................................................... 201
D. Sample of Research Instrument ............................................................... 204
E. Individuals Offering Legislative Testimony and Related Documentation .... 222

LIST OF REFERENCES ......................................................................................... 226
## LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reliability Coefficients for Importance and Acquisition Subscales</td>
</tr>
<tr>
<td>2</td>
<td>Head of Program</td>
</tr>
<tr>
<td>3</td>
<td>Gender</td>
</tr>
<tr>
<td>4</td>
<td>Years of Experience in Present Position</td>
</tr>
<tr>
<td>5</td>
<td>Years of Experience in Administration</td>
</tr>
<tr>
<td>6</td>
<td>UCEA Membership</td>
</tr>
<tr>
<td>7</td>
<td>UCEA Experience in Present Position</td>
</tr>
<tr>
<td>8</td>
<td>UCEA Experience in Administration</td>
</tr>
<tr>
<td>9</td>
<td>Special Education Coursework Requirement</td>
</tr>
<tr>
<td>10</td>
<td>Familiarity with the Biaggi Bill</td>
</tr>
<tr>
<td>11</td>
<td>Geographical Distribution of Universities</td>
</tr>
<tr>
<td>12</td>
<td>Overall Perceptions of Gifted and Talented Programs</td>
</tr>
<tr>
<td>13</td>
<td>Need for Additional Training</td>
</tr>
<tr>
<td>14</td>
<td>Need for A Knowledge Base</td>
</tr>
<tr>
<td>15</td>
<td>Need for Inservice Workshop Attendance</td>
</tr>
<tr>
<td>16</td>
<td>Need of Coursework for State Certification</td>
</tr>
<tr>
<td>17</td>
<td>Skill Level Acquired to Prescribe Remedial Measures for Teachers</td>
</tr>
<tr>
<td>18</td>
<td>Skill Level Acquired to Assess Teacher Performance</td>
</tr>
<tr>
<td>19</td>
<td>Importance of IEP Team Leadership Skills</td>
</tr>
<tr>
<td>20</td>
<td>Acquisition Level of IEP Team Leadership Skills</td>
</tr>
<tr>
<td>21</td>
<td>Importance of IEP Construction Skills</td>
</tr>
<tr>
<td>22</td>
<td>Acquisition Level of IEP Construction Skills</td>
</tr>
<tr>
<td>#</td>
<td>Description</td>
</tr>
<tr>
<td>----</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>23</td>
<td>Need for Gifted and Talented Student IEP's</td>
</tr>
<tr>
<td>24</td>
<td>Need for Gifted and Talented Program Services</td>
</tr>
<tr>
<td>25</td>
<td>Importance of Communicating School District Philosophy</td>
</tr>
<tr>
<td>26</td>
<td>Acquisition Level of Communication Skills</td>
</tr>
<tr>
<td>27</td>
<td>Importance of Working Within State Guidelines</td>
</tr>
<tr>
<td>28</td>
<td>Importance of Assuring Program Compliance</td>
</tr>
<tr>
<td>29</td>
<td>Need for Principal's Support of Mainstreaming</td>
</tr>
<tr>
<td>30</td>
<td>Importance of Curriculum Compacting Knowledge</td>
</tr>
<tr>
<td>31</td>
<td>Importance of Differentiated Instruction Knowledge</td>
</tr>
<tr>
<td>32</td>
<td>Importance of Grade Acceleration Knowledge</td>
</tr>
<tr>
<td>33</td>
<td>Importance of Correct Aptitude-Intellect Instruction</td>
</tr>
<tr>
<td>34</td>
<td>Importance of Teacher Access to Gifted Materials</td>
</tr>
<tr>
<td>35</td>
<td>Importance of a Creative, Flexible Master Schedule</td>
</tr>
<tr>
<td>36</td>
<td>Importance of Program Development Skills</td>
</tr>
<tr>
<td>37</td>
<td>Importance of Providing Inservice Staff Development</td>
</tr>
<tr>
<td>38</td>
<td>Acquisition Level of Inservice Skills</td>
</tr>
<tr>
<td>39</td>
<td>Acquisition Level of Skills to Establish Parent Support Group</td>
</tr>
<tr>
<td>40</td>
<td>Importance of Student Placement Decision-Making Skills</td>
</tr>
<tr>
<td>41</td>
<td>State Department Responsibility for Certification Requirements</td>
</tr>
<tr>
<td>42</td>
<td>Need for State Department's Assistance to Universities With Certification Requirements</td>
</tr>
<tr>
<td>43</td>
<td>Importance of Philosophy Skills</td>
</tr>
<tr>
<td>44</td>
<td>Acquisition Level of Philosophy Skills</td>
</tr>
<tr>
<td>45</td>
<td>Importance of Leadership Skills and Knowledge</td>
</tr>
<tr>
<td>Table</td>
<td>Title</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------</td>
</tr>
<tr>
<td>46</td>
<td>Acquisition Level of Leadership Skills and Knowledge</td>
</tr>
<tr>
<td>47</td>
<td>Importance of Curriculum Skills and Knowledge</td>
</tr>
<tr>
<td>48</td>
<td>Acquisition Level of Curriculum Skills and Knowledge</td>
</tr>
<tr>
<td>49</td>
<td>Importance of Supervision Skills and Knowledge</td>
</tr>
<tr>
<td>50</td>
<td>Acquisition Level of Supervision Skills and Knowledge</td>
</tr>
<tr>
<td>51</td>
<td>Importance of Evaluation Skills and Knowledge</td>
</tr>
<tr>
<td>52</td>
<td>Acquisition Level of Evaluation Skills and Knowledge</td>
</tr>
<tr>
<td>53</td>
<td>Importance of Personnel Skills and Knowledge</td>
</tr>
<tr>
<td>54</td>
<td>Acquisition Level of Personnel Skills and Knowledge</td>
</tr>
<tr>
<td>55</td>
<td>Importance of Planning and Organization Skills and Knowledge</td>
</tr>
<tr>
<td>56</td>
<td>Acquisition Level of Planning and Organization Skills and Knowledge</td>
</tr>
<tr>
<td>57</td>
<td>Importance of School Law Skills and Knowledge</td>
</tr>
<tr>
<td>58</td>
<td>Acquisition Level of School Law Skills and Knowledge</td>
</tr>
<tr>
<td>59</td>
<td>Importance of School Finance Skills and Knowledge</td>
</tr>
<tr>
<td>60</td>
<td>Acquisition Level of School Finance Skills and Knowledge</td>
</tr>
<tr>
<td>61</td>
<td>Importance of Multi-Cultural Issue Skills and Knowledge</td>
</tr>
<tr>
<td>62</td>
<td>Acquisition Level of Multi-Cultural Issue Skills and Knowledge</td>
</tr>
<tr>
<td>63</td>
<td>Preservice Training Models - Weighted Scores</td>
</tr>
<tr>
<td>64</td>
<td>t-Test on Comparison of Training Models and UCEA Membership</td>
</tr>
<tr>
<td>65</td>
<td>Chi Square Test for Independance Between Task Importance and Task Acquisition</td>
</tr>
<tr>
<td>TABLE</td>
<td>PAGE</td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>66 Need for Federal Financial Incentives to States to Promote Gifted and Talented Programs</td>
<td>155</td>
</tr>
<tr>
<td>67 Chi Square Test for Independence: Coursework by Incentives</td>
<td>156</td>
</tr>
<tr>
<td>68 Chi Square Test for Independence: Familiarity by Incentives</td>
<td>157</td>
</tr>
<tr>
<td>69 Comparison of Importance and Acquisition of Skills as Perceived by Heads of Preparation Programs</td>
<td>159</td>
</tr>
<tr>
<td>70 Pearson Correlation Coefficients for Selected Variables</td>
<td>161</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

FIGURE                                                                 PAGE

1  A Generic Program for Training Principals       193

LIST OF FIGURES
CHAPTER I
INTRODUCTION

The success or failure of any program within a school is contingent to a large measure upon the attitudes, skills, and knowledge of the building principal (Webb, 1984). Kaplan (1974) states that programs for children who are gifted and talented especially need the active support of the building principal. These special programs, according to Durr (1964) will fail if the principal does not have a positive attitude toward their success. Attitudes are important! Nunnally (1967) describes attitudes as feelings toward particular social objects—physical objects, types of people, particular persons, social institutions, government policies, and others. Principals' attitudes are their feelings derived from their learning experiences, their university training programs, and their interactions with other administrators (Campbell, 1977). To understand principals' attitudes toward school programs, one needs to explore the university training programs, the academic experiences that impacted on those activities.

The history of training school administrators is traced by Owens (1981) to such early works as Woodrow Wilson's essay, "The Study of Administration" (1887) which emphasized the importance of scholarly study, and also to Chester Barnard's work, Functions of an Executive (1937) which applied the theories of industrial management to other
complex organizations, while adding new human relations concepts. It was not until the 1950's, however, that school administration theory came to be recognized as a field for scientific study (Owens, 1981):

Traditionally, educational administration had been taught by former superintendents whose knowledge of their subject came largely from years of hard earned experience in the "front lines" (p. 27). University courses in educational administration tended to focus on practical, "how-to-do-it" problems, drawing on the past experience of practicing administrators. Skills and techniques, along with attitudes, were shared with their students (Owens, 1981).

Later, university training programs began to study leadership styles, behavior in the position, and interaction with persons within the organization. Daniel Griffiths (1959) authored an important work, "Administrative Theory," on decision-making skills needed by school administrators. This text provided a new path for administrators to understand the need of consideration for their subordinates. Owens (1981) emphasizes that new courses in behavior management took their place alongside established courses in budgeting, finance, and law.

In the 1950's, internship training programs were popular in many locations. Hencley (1963) reported that 41 states had some type of internship or other field experience offered at one or more of the universities. Internships sought to put theory into practice by placing an administrator-trainee in a school district under the supervision of a principal or superintendent for a period of time, commonly for one year. This experience was under the tutelage of a college
professor, with regular visits from an employed university supervisor, who was often a retired school administrator. West (1977) found that as many as twenty-five percent of the training institutions maintained some type of internship program. Hencley also found that although care was taken in the selection of mentor administrators, biased attitudes toward special programs and special populations existed and therefore impacted on the apprenticed school administrator.

Liphara (1985) adds support to the value of the internship concept by stating:

Despite the expense and effort required, professionals acknowledge that an administrative internship is an essential element in programs preparing prospective principals to use essential theory to improve educational practice. Universities have upgraded the courses in educational administration by including role playing, simulation, and case analysis techniques in an attempt to improve the technical skills needed by prospective principals (p. 296)

Two national organizations, the University Council for Educational Administration (UCEA), and the National Association for Secondary School Principals (NASSP) have continued to give credence to the internship program. Most programs today such as the Educational Administration Certification Program (1985) at The Ohio State University require some type of field experience. Work under the direct supervision of a practicing school administrator is required.

Theories on the content of educational administration preservice training programs were influenced by a variety of events as well as by authors of the literature in the field. For example, in 1957 the successful launching of Sputnik I by Russian scientists brought about
a national demand for American scholars, scientists, and bright minds. Stewart (1972) states that this event impacted on the attitudes of administrators toward honors courses, acceleration programs, and differentiated curricula in the high schools. Principals, according to Stewart, needed new skills to provide these intensive programs. As a result, gifted programs received a more favorable emphasis. Ohio's Cleveland Major Works Program, California's Mentally Gifted Minors' Program, Georgia's Governor's School and programs in Connecticut and Illinois became important as models for responding to this demand (Wickstrom, 1978).

Vocational Education Acts which passed Congress in the 1960's brought about change in the administrative attitudes toward the needs of students preparing for the world of work. Campbell (1977) states that universities responded with more emphasis in extending the curriculum to the vocational training programs. Vocational Rehabilitation Legislation Acts (1973) also channeled federal dollars to the various universities for research and exemplary training programs.

In 1971, the Marland Report was released to Congress and gave strong evidence that principals had little awareness of how many gifted children were being served in their schools (Barstow, 1981). This was followed by a wave of civil rights legislation in the 1970's, especially the Educational for All Handicapped Act of 1975 (PL 94-142), which provided strong evidence that a change was needed in the training programs for school principals. Mize (1984) and Cook (1984) found in their studies that principals lacked skills to
adequately supervise the special programs housed in their buildings. Bugge (1982) stated,

A majority of the administrators expressed confidence in the organizational components of special education, but they lacked the confidence in supervising the actual special education operation or providing instructional, technical assistance to teachers. While most of the administrators had received some type of special education training, few had attended a college class in special education administration (p. 47).

Cook (1984) posited that a majority of the principals in his study had never taken any courses in special education or special education administration. Most principals had acquired their skills from inservice training experiences. Brown (1982) reported that persistent, negative attitudes toward mainstreaming special needs children into the regular classroom were prevalent among principals.

Similar voids were found to exist in the preparation of principals to help them take an active role in the development of programs for gifted and talented children (Martin, 1982). Wickstrom (1978) surveyed principals in Iowa and found that elementary principals had a need for more training in the identification of gifted and talented pupils. Wickstrom went on to state that principals in her study lacked an awareness of the need for gifted and talented programs. A study by Laaperi (1984) disclosed a need by principals to be knowledgeable in gifted program development. In addition, the principal's role as an advocate for gifted programs needed to be reinforced. Peters (1979) found the need for principals to increase their skills in implementing Individualized Education Plans (IEP's) for gifted students.
During the time from 1950 to 1980, preservice training programs for principals steadfastly maintained the core curriculum approach. Campbell (1977) reports that specific requirements continued to be centered around administrative theory, budgetary processes, personnel evaluation, and legalistic problems. Few attempts were made to bring principals face to face with the unique needs of either the handicapped child or the gifted and talented population. Stile and Pettibone (1980) reported only a small number of states requiring any coursework in special education for principals. Giftedness was not included. Theirs was a national survey of the practices within all the states. They also cited a lack of communication between the state education agencies and institutions of higher learning as contributing to a lack of consistency on certification standards.

Preservice training models that have emerged in the 1980's emphasize preparing principals to assume an effective leadership role (Gorton, 1983). These models, while centering around administrative skills needed, tend to feature aspects of instructional leadership, human resource development, and staff development. Lipham (1985) states:

Recently, most programs for preparing principals assume that concepts and constructs concerning educational issues and goals, administrative organization, instructional leadership, decision-making, educational change, and other theories are essential for effective performance of principals (p. 294).

Lipham also describes the competency-based approach to administration wherein theoretical concepts are stressed and
translated into specific skills and behaviors that can be taught, learned, and assessed. McPherson et al (1986) cite current research in the area of human resource development whereby administrators are perceived as teachers of teachers. They are encouraged to take a leadership role in the education of their subordinates. Four elements of this approach direct the principals to:

1. Provide reinforcement and feedback to the teachers.
2. Create learning opportunities for the staff.
3. Instill confidence in the teaching staff.
4. Express concern for teacher career success.

Gorton (1983) states that the most important area for which an administrator has leadership responsibilities is the instructional program. The instructional program is defined as all of the factors and conditions within a school that influence student learning.

Gorton (1983) also suggests that an administrator can be an instructional leader, and if a school is to be successful, must possess educational vision, teaching expertise, a strong commitment, high energy, a willingness to take risks, and human relations skills. Gorton states:

Knowledge about the different aspects of the instructional and curricular program, and skill in introducing change in that program, as well as in the people who staff it, are key elements in the expertise that an administrator will need if he intends to exercise effective instructional leadership (p. 266).

Guthrie and Reed (1986) state that the most significant lever that can be used to improve school effectiveness is to recruit, properly
prepare, and continually motivate able educators. These authors describe human resource development administration as being devoted to securing and maintaining a staff consistent with school organizational needs and goals. Such activities as staff recruitment, selection, induction, supervision, appraisal, development, and incentives are seen as important.

Many of the administrative concepts which are incorporated into the training models previously described are also built into the effective schools model. Edmonds (1979) theorizes that although his model addresses mainly low socio-economic schools, these same factors are very important for any school to become effective. There are seven characteristics of effective schools which set them apart from other schools. These characteristics are:

Effective schools:

1. Make a conscious decision to become effective schools and that is their mission.

2. Have principals who are, in fact, the instructional leaders of the staff.

3. Expect teachers to teach and pupils to learn.

4. Have teachers and principals who are constantly aware of pupil progress in relationship to the instructional objectives.

5. Have an atmosphere that is orderly without being rigid, quiet without being oppressive, and generally conducive to the instructional mission.

6. Emphasize more time on task.

7. Have broad parent and community involvement. (p. 1/
Austin (1979) supports the effective schools concept of strong principal leadership, high expectations, and increased instructional time. He discusses longitudinal studies done in several states which attribute educational success to instructional leadership. Cohen (1982) states that effective schools are characterized by strong administrative leadership by the school principal, especially in regard to instructional matters. Mueller and McKeown (1986) state that effective leadership generates and maintains the enthusiasm of everyone on the educational team. They also cite the educational reform movement that exists nationally to upgrade certification standards, and improve employment standards. The following excerpt from their text summarizes much of the literature:

The current nationwide demand for improved student achievement carries with it an emerging awareness of the importance of having good school administrators. The colleges of education are being chastized for not producing better leaders through the inservice programs. State departments of education are being called upon to raise the state certification standards for new principals.

In addition, school boards are being pressured to hire or retain only those administrators who provide effective educational leadership. School boards are also being alerted to the need for training programs that will support and maintain a cadre of top notch administrators. (p. 173)

Mitchell and Cunningham (1986) cite state departments of education as having control of certification standards and strong influence on university preservice training programs. Universities, according to Mitchell and Cunningham, shape their programs to accommodate major state certification emphasis.
In summary, many studies concerning the content of preservice training programs, skills and knowledge needed by principals, and principals' attitudes toward special programs and special populations are being conducted in the 1980's. Needed, valuable information for developing future training models will be derived. The effectiveness of principals to resolve future educational problems and serve as educational leaders will be contingent on the content of these models. It is predicted by this researcher that the university professors of educational administration will have significant influence in the process. Great potential for change therefore lies within the attitudes of these academic professors.

Statement of the Problem

University pre-service training programs for school administrators historically have not included coursework preparation in the area of gifted and talented education. Yet, building principals are expected to administer the special programs and resulting special problems accompanying them. A study by Peters (1979) recommended that principals be trained in gifted education if they are to assume the role of instructional leader for program development and for program implementation in their building. The principal is the key leadership person and needs to be knowledgeable and committed to gifted education. Zeilinger (1980) recommended that universities develop pre-service and in-service programs to facilitate the principal's awareness of identification models for gifted and talented programs.
The need for principals to acquire program implementation techniques was also cited by Zeilinger as part of what should be gained through a university training program.

In addition, principals need to be prepared to work with the segments of the gifted population who are referred to by Whitmore (1984) as underachieving, learning disabled, language impaired, culturally deprived, and minority-related, which may include girls in the areas of math and science. While there is no federal legislation to mandate programs and services for gifted and talented children many of these children may already qualify for extra services under PL 94-142, The Education for All Handicapped Act of 1975.

One piece of federal legislation, H.R. 543, the Jacob Javits Bill, known as The Gifted and Talented Children and Youth Act of 1987, is now under consideration by Congress. This bill, if passed, would provide the needed impetus leading to required services for gifted and talented children. In its present form there is a modest amount of money tied to the bill, $25 million, but it does represent evidence of support at the national level.

The problem, then is to determine what is the nature of skills and knowledge needed by principals to work effectively with children who are identified as exceptional, who function at the extreme end of the learning spectrum, and who have very special educational needs.

**Background—Need for the Study**

A limited number of studies have been done that have investigated
the attitudes of school principals toward their university training programs, as related to training received which prepared them for work with exceptional children. Davis (1980) conducted a study in the state of Maine and found that principals were lacking in training and preparation. Very few principals had taken any courses in special education administration. Bullock (1970) had earlier found similar voids. Wickstrom (1978) surveyed principals from Iowa, and Barstow (1981) conducted a study on the attitudes of boards of education and superintendents in California. In each case, reference was made to the role of the principal as the key person to ensuring the success of special programs.

Further investigation of the research shows a slightly higher number of studies having been conducted which looked at the attitudes of principals toward mainstreaming special needs children into the regular classroom. Early studies such as Burrello (1979) and Betz (1977) were concerned with handicapped children. Only recently are studies being done on placement problems involving gifted and talented children, and on attitudes of administrators toward mainstreaming this population (Laaperi, 1984, and Griffin, 1984).

Stile and Pettibone (1980) reported in their study of 50 states that 12 of the states required at least one special education course as part of their administrative preparation program. They reported that many states only recommend a survey course in special education to meet the requirements.

No studies were found which addressed university personnel on an attitudinal scale related to the preparation patterns of school
principals where gifted and talented programs were concerned. It is
this void in the literature which will be addressed by this study.

**Purpose of the Study, Population, Objectives**

The purpose of this study is to identify the attitudes toward
gifted and talented education programs by heads of programs for
training school administrators. The program heads to be surveyed
represent colleges and universities which train principals and provide
post-graduate level programs in gifted and talented education. To
achieve this purpose, the following objectives will be investigated.

1. Describe the population, based on personal and demographic
   variables.

2. Describe the attitudes of the heads of programs for
   educational administration related to:
   a. Level of skills acquired by principals in their
      university training programs to
      (i) administer gifted and talented education programs
          housed in their building
      (ii) supervise gifted and talented education teachers
          working in their building
      (iii) provide leadership in gifted and talented child IEP
          team conferences
      (iv) work with parent and community problems which are
          related to gifted and talented programs.
   b. Perceived importance of knowledge obtained by principals
      in their university training programs to:
(i) work within current State Department of Education Gifted and Talented Program Guidelines
(ii) provide for the range of academic needs of the gifted and talented children
(iii) Provide leadership for program development and implementation in gifted and talented education programs located in their building.

3. Describe the extent to which the survey respondents support a need for change in state certification standards for school principals to include university coursework in gifted and talented education?

4. Describe the extent to which the survey respondents support the concept that school principals already working in the field should acquire the above-mentioned skills and should obtain the above-mentioned knowledge by way of attendance at inservice workshops?

5. Describe the extent to which the survey respondents agree that the skills and knowledge listed in the survey instrument should be included in preservice preparation programs for training school principals?

6. Describe the extent to which the survey respondents agree that the skills and knowledge listed in the survey instrument will normally be acquired by school principals in their preservice training programs?

7. Describe the extent to which the survey respondents agree that coursework currently exists at their university which
addresses the skills and knowledge needed to administer
gifted and talented education programs?

8. Describe the extent to which the survey respondents agree
that models listed in the survey instrument are appropriate
for providing principals with the skills and knowledge
necessary for administering gifted and talented programs?

9. Describe the extent to which the study has implications for
federal intervention in gifted and talented education?

10. To investigate the relationships between the respondents'
perceptions of the importance of the skills and knowledge and
the level of acquisition of those skills and knowledge
identified in the study?

11. To investigate the relationships between the independent and
the dependent variables of the study?

Significance of the Study

This completed study can bring attention to the need for change in
the preparation patterns for school principals. Literature in the
field illustrates a definite coursework gap in the university
preservice training that principals receive. Implications in a study
by Castle (1979) showed that school principals were working under a
handicap where they were expected to administer programs for gifted and
talented children in their building, and where they had not completed
any university coursework in preparation for the task. It was
recommended that institutions of higher education require such courses
for all school administration graduates. A study by Laaperi (1984)
cited a lack of skills possessed by principals for initiating new programs for gifted and talented children. In a study by Cooper (1984), principals were described as being unsure of their advocacy posture concerning gifted and talented programs.

Recommendations to the Michigan State Legislature have included the requiring of at least one course in special education for general administration candidates (Raske, 1977). Similar recommendations were adopted by the Ohio State Superintendent's Task Force on July 9, 1985. Recommendations from that group requested that State Standard (3301-21-03 and 3301-21-04) be expanded to include:

1) an overview course related to exceptional individuals, including due process, procedural safeguards, and the IEP process; and 2) a course on program development, curriculum adaptation, and service delivery systems for special education, (State Superintendent's Task Force, 1985)

The National Council for Accreditation of Teacher Education adopted Standard 2.1.2 in July, 1982 which addressed training program needs as,

All educators should have the knowledge and skills necessary to enable them to respond to the individual differences of learners. Professional education programs should prepare all school personnel to contribute to the education of exceptional learners. (NCATE, 1982)

The Ohio State Board of Education approved new standards for the certification of elementary and high school principals in November, 1985 (Chapter 3301-23-14 and 3301-23-16). No mention is made of program requirements in the education of exceptional children. Mize (1984) reported a similar void for state certification requirements
for principals in South Carolina, although as in Ohio, support for change had been strongly expressed to the State Department of Education.

**Definition of Terms**

1. **Exceptional Child** - refers to any child whose performance deviates from the norm, either below or above to such an extent that special educational programming is indicated (Heward & Orlansky, 1984, p. 4).

2. **Gifted and Talented** - are those children who give evidence of high performance capability in such areas as intellectual, creative, artistic, leadership capacity, or specific academic fields, and who require services or activities not ordinarily provided by the school in order to fully develop such capabilities (Section 582, P.L. 94-35). This same high performance capability is stated in the Biaggi Bill, known as the Gifted and Talented Children and Youth Education Act of 1985 (H.R. 3263).

3. **Individualized Education Plan (IEP)** - refers to a written statement for an exceptional child that is developed and implemented by a school district; that is a teamed effort to provide specific educational services to meet the unique needs of the child (Ohio Department of Education Regulations, 1982).

4. **Learning Disabled** - refers to any child having a severe discrepancy between achievement and ability which adversely affects educational performance to such a degree that special educational and
related services are required (Ohio Rules for the Education of Handicapped Children, 1982).

5. Mainstreaming - refers to the process of integrating exceptional children into regular school and classes (Heward & Orlansky, 1984), and would include the gifted and talented population.

6. Underachieving - refers to the significant failure of gifted children to achieve academically at the level of predicted competence (Swassing, 1985).
CHAPTER II

REVIEW OF THE LITERATURE

The purpose of this chapter was to review literature in the field which contributed to the topic of this study: attitudes toward gifted and talented education by heads of programs for educational administration. To attain this purpose, six main focal points were addressed.

First, an historical review of gifted and talented programs was done to gain a better understanding of local, state, and federal involvement in their development. Secondly, literature describing attitudes toward the gifted population was reviewed to expand the researcher’s knowledge on how this group of individuals has been identified over time. Next, authors who contributed to the field of educational administration were researched to ascertain their role in the establishment of a philosophy of education for training school principals. Studies of how school administration training programs evolved was the topic of the next section of the chapter. Attitudes toward the content of preparatory programs were of special interest. Current preservice models for training school administrators were then studied to assist in determining the most common models in existence as well as their program elements. Here, compatibility with gifted and talented education program concepts was of interest. The final section of Chapter Two was undertaken to explore the various studies of attitudes toward the skills and knowledge needed by school administrators.
A. An Historical Treatment of Gifted and Talented Programs

Early programs for gifted students in the public schools began sporadically, and primarily in metropolitan areas (Kitano, 1986). The concern of a few early educators led to special programming that benefited unusually bright students. Tannenbaum (1983) provides an historical account of how attitudes toward scholarly students first surfaced in St. Louis in 1868. Gifted students were accelerated in the elementary program and could complete eight years of the curriculum in six years. Stewart (1972) states that

"William T. Harris, superintendent of the St. Louis public schools, recognizing the problem of differences in aptitudes for school progress, introduced a plan of flexible promotions in 1867 to permit bright children to advance through the graded system at a stepped-up pace. The plan provided for promotion every five weeks throughout the school year when such promotion was justified in terms of achievement." (p. 6)

Elizabeth, New Jersey utilized an early teaching system in 1886, whereby students were ability grouped and could bypass qualifying exams for higher education if they had performed at an unusually high level. The Concentric Plan in Santa Barbara and the Constant Group System in New York City and Chicago followed a similar plan for meeting the needs of gifted children. Tannenbaum (1983) describes a flexible promotion system used in Cambridge, Massachusetts in 1891, known as the Double-Track Plan. Special teachers were assigned to help gifted students move faster. Variations of this system were to be seen in numerous school systems for years to come. By 1900, New York City had established its first Rapid Advancement class in a
single school, a forerunner to Special Progress classes which allow students to complete three years of junior high school in two years, and exist even today.

In 1901, Worcester, Massachusetts opened the first special school designed for gifted children. This was a grade seven through nine level school and accommodated students from a wide area. Baltimore also began a similar type preparatory school in 1902. Stuyvesant High School for gifted boys began at this time in New York City and was an enrichment type program in science, mathematics, and mechanical arts.

Experimental classes for students who scored high on the Stanford-Binet test were started in Louisville, Kentucky in 1918. Students had their own individual educational plan and worked at an accelerated pace. Other high IQ classes were begun in Urbana, Illinois; Berkeley, California; and New York City. Acceleration within the curriculum was preferred over grade skipping (Tannenbaum, p. 13).

By 1920, special programs for gifted students were more common. Los Angeles, California offered opportunity classes for enrichment. The Cleveland Major Works Program and Columbus' Cox Experimental Classes in Ohio featured enrichment as did the Detroit X,Y,Z Plan. During this era, attitudes toward gifted education shifted from ability grouping to acceleration, and ultimately to enrichment.

By the 1930s, Tannenbaum (1983) reports, attitudes toward gifted students had swung to mainstreaming them into the general programs. Influence from child study specialists to keep all students in regular
classes prevailed. National economic factors and World War II further caused many of the early programs to be discarded.

By the 1950's, fueled by Witty's book, *Gifted Child* (1951), Terman's completed longitudinal studies (1959), and the Sputnik crisis (1957), gifted programs again were in demand. California's Mentally Gifted Minors Programs, the Governor's School in North Carolina, the Illinois Demonstration Centers for Teaching the Gifted, the Georgia Governor's Honors Program (1964), and the Louisiana Governor's Program (1965) were outgrowths of a concern for providing special, educational and personal experiences for gifted students.

More recently, advocacy groups and professional support organizations have been created. The Gifted Child Society of New Jersey, the American Association for Gifted Children, the National Association for Gifted Children, and the Talented and Gifted division of the Council for Exceptional Children provide support and leadership to parents and educators who are responsible for the education of gifted children.

In 1975, only 12 states reported having state directors of gifted programs. In October, 1985, a national organization, the Council of State Directors of Programs For the Gifted, listed a full or part time director in all but five states. The Department of Special Education was responsible for gifted programs in those five states.

The works of Whitmore (1980), Tannnenbaum (1983), Kitano (1986), and Horowitz (1985), contributed to the following account of national attention given to the gifted and talented population from 1920 to 1987, the present. Studies by Stewart (1972), Peters (1979),
and Barstow (1981) provided further information for this historical accounting.

In 1920 and again in 1924, the National Society for the Study of Education published several volumes relating to gifted programs and research.

In 1931, the U.S. Office of Education voluntarily established a special Section on Exceptional Children.

In 1950, The National Science Foundation Act was passed to encourage the development of gifted scientists and mathematicians.

In 1950, the National Policies Commission cited a lack of attention given to gifted students in the schools.

In 1953, the Talented Youth Project was organized by the Horace-Mann-Lincoln Institute at Columbia University under the direction of Dr. A. Harry Passow (Stewart, 1972). The project was established to assist the study of talented children.

In 1956 the National Merit Scholarship Corporation presented 556 awards to outstanding scholars for their college education.

In 1957, the Soviet Union launched the first satellite into space. The effects of this event drew national attention to the need for exceptional scientists. The United States faced a tremendous loss of prestige and a threat to national security (Kitano, 1986). Gallagher (1975) refers to this period as when "a frightened Congress put large sums of money into curriculum programs with the explicit purpose of preventing the Russians from beating us in the space race". (p. 303).

In 1958, Congress passed the National Defense Education Act (NDEA) and during the next four years nearly one billion dollars was made available to the states to train teachers, to advance science, mathematics and foreign languages, to develop testing programs, and to provide guidance programs (Horowitz, 1985). Attitudes toward gifted and talented students improved markedly during this time. Goldberg (1965) reported that a National Education Association (NEA) survey reported nearly 80 percent of secondary schools were offering some kind of special program for gifted students.

In February of 1958, the NEA held a conference, assisted by Dr. James B. Conant, president emeritus of Harvard University, and attended by 200 educators, to study the problems of gifted children (Stewart, 1972).
In 1958, the Carnegie Corporation funded the establishment of an information clearinghouse for gifted education in Washington, D.C. under the direction of the NEA.

In 1963 President Lyndon Johnson established the President's Scholars Program to recognize and encourage excellence in bright students.

In 1965 the Higher Education Act was passed to assist in the preparation of teachers in special programs.

In 1969, PL 91-230, Section 806 added gifted education to the use of Title III and Title V of the ESEA Acts. It also directed the Commissioner of Education, Sidney Marland, to survey the national status of gifted education and to report his findings to Congress (Horowitz, 1985).

In 1971, Commissioner Marland submitted a comprehensive report to Congress which included a definition of gifted and talented:

Gifted and talented children are those, identified by professionally qualified persons, who by virtue of outstanding abilities are capable of high performance. These are children who require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and society. Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas, singly or in combination: general intellectual ability, specific academic aptitude, creative or productive thinking, leadership ability, visual and performing arts, and/or psychomotor ability." (p. 2)

In 1975, PL 93-380 Education Amendments, Section 404 of Title IV established the Office of Gifted and Talented within the U.S. Office of Education. It set up categorical funds of $2.5 million, set up training and support grants for gifted education, and established a national clearinghouse on information related to the education of the gifted and talented (DeLeon, 1985).

In 1978, PL 95-561, The Gifted and Talented Childrens Act was passed as Part A, Section 901, Title IX of ESEA and signed by President Carter. For several years the federal level of appropriations for gifted education reached the $6 million mark. The Act provided a new definition of giftedness. It also declared that gifted children constitute the nation's greatest resource for solving critical national problems.

In 1981 the National Commission on Excellence in Education was created by Education Secretary Bell and directed to evaluate the quality of American education.

In 1981, the Gifted and Talented Childrens Act was repealed and consolidated into the Chapter 2 Block Grants of the Omnibus Budget Reconciliation Act of 1981. Federal funds available for gifted education dropped sharply - by forty-two percent (DeLeon).

In 1982, the National Commission on Excellence in Education reported that American schools did not compare favorably with Russia and Japan in the study of science and mathematics.

In 1983 the Commission made its final report entitled "A Nation At Risk," and pointed out that gifted students were not achieving to their potential. Kitano (1986) states, "The findings of the Commission included charges of diluted curricula, low expectancies for students, ineffective use of school time, and the inability of the teaching field to attract bright persons." (p. 16) To meet these charges the Commission issued a national challenge to improve educational standards, expectations, and requirements in the schools and universities. Kitano continues by stating, "The federal government's responsibility in identifying education as being in the national interest includes efforts to meet the needs of key groups of students such as the gifted and talented." (p. 17).

In 1984, HR 5596, the Education for Gifted and Talented Children and Youth Improvement Act was introduced, but did not become enacted.

In 1985, S 134 was introduced by Senator Daniel Inouye to re-establish the Office of Gifted and Talented, but did not become enacted.

In 1985, S 452, the Jacob K. Javits Gifted and Talented Childrens Education Act was introduced, also to re-establish the Office of Gifted and Talented. It too, did not gain enough bipartisan support for passage.

The year, 1986 brought the introduction in Congress of new gifted and talented education legislation, the Biaggi Bill (H.R. 3623). This Bill with the benefit of bipartisan support and a companion bill in the U.S. Senate (S. 34) was
strongly considered by Congress. The Bill actually passed in the House of Representatives, but not in the Senate. Adjournment of the 99th Congress took place before the Bill was successfully moved through Senate committee channels.

Testimony on behalf of the Biaggi Bill was given in May, 1986. Those offering such support included Congressman Biaggi, Congressman Rahall (W. Va.), James J. Gallagher, A. Harry Passow, The Council for Exceptional Children (CEC), The Gifted Child Society, The National Association of Gifted Children (NAGC), The Council for the Advancement of Gifted Education (CACE), and various other gifted education professionals. Congressman Biaggi is quoted as stating, "The Federal government has a responsibility to ensure that the best and brightest of our nation's students are adequately, effectively, and specifically served by our educational system." (1986)

Sparked by the near success of federal legislation in 1986, Congressman Biaggi (NY) re-introduced gifted and talented legislation in 1987 as The Jacob K. Javits Gifted and Talented Children and Youth Act of 1987 (H.R. 543). Again a companion bill (S. 303) with the identical name was introduced in the U.S. Senate by Senator Bradley (NJ).

The Javits Bill cites the following findings:

(1) gifted and talented children and youth are a national resource vital to the future of the Nation and its security and well being;

(2) the special abilities of gifted and talented children and youth must be recognized and developed during their elementary and secondary school years, or their special potential for contributing to the national interest is likely to be lost;

(3) gifted and talented children and youth from economically disadvantaged families and areas are at greatest risk of being unrecognized and of not being provided adequate or appropriate educational services;

(4) State and local educational agencies and private non-profit schools often lack the necessary specialized resources to plan and implement effective programs for the identification of gifted and talented children and youth, for the provision of educational services and programs appropriate to their special needs; and
(5) the Federal Government can best carry out the limited but essential role of stimulating research and development and personnel training, and providing a national focal point of information and technical assistance, that is necessary to ensure that our Nation's schools are able to meet the special educational needs of gifted and talented children and youth, and thereby serve a profound national interest. (p. 2)

The Javits Bill presented an updated definition of gifted and talented: "The term gifted and talented children and youth means children who give evidence of high performance capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields and who require services or activities not ordinarily provided by the school in order to fully develop such capabilities." (pp. 3-4)

Expected appropriation levels for the Javits Act would be $25 million annually. Funds would be used for preservice and inservice programs, model projects, university training, and technical assistance. A National Center for Research and Development in the education of gifted and talented children would be established. High priority was given in this legislation to children who may be difficult to identify as being gifted or talented due to economic depression, limited English proficiency, or physical handicap. Private schools are also listed specifically as participants in this Act.

In summary, Congressman Biaggi states in the January 8 Congressional Record (1987), "Gifted and talented children and youth are a national resource vital to the future of this Nation and its security and well-being. Unless the special abilities of these children and youth are recognized and developed during their elementary and secondary school years, much of their special potential for contributing to the national interest is likely to be lost". In addition, the official legislative agenda for the 100th Congress, Committee on Education and Labor includes Gifted and Talented Education as one of its initiatives for 1987. These events provide evidence of a current National support for the education of our gifted population.
B. Studies of Attitudes Toward Gifted Populations and Programs

Attitudes toward gifted individuals have been cited in the literature by numerous authors. Whitmore (1980) states that ancient tribes held gifted children in reverence, often separating the exceptional children from the rest. Horowitz (1985) looked in depth at the cultures of the early primitive tribes and relates how Totemism (dying animal figures) caused certain individuals to aspire toward becoming priests, or kings. This is viewed as an early method of focusing on gifted persons within the early tribes. Kitano (1986), also traces the attitudes toward gifted individuals through early history. Plato is credited by Kitano as having sought out gifted children for special treatment in a special school. Kitano states, "The Athenian philosopher, Plato (427-347 B.C.) argued that a better social order could be achieved if those who governed were selected from the intellectually able". Prior to Plato's 'Academy,' rule by divine right of birth was the accepted method for selecting royalty. The Romans were accepting of gifted girls, according to Kitano's historical sketch, but were not willing to permit girls to attend universities.

Tannenbaum (1983) discusses the role of the church in the Middle Ages in controlling attitudes toward who would be educated. Theology was seen as the central moving force. Those who could master the scriptures were given high places within the church, especially if they could motivate the masses to unquestionably believe in the sanctity of the scriptures. Tannenbaum states, "Social and religious
leadership often went hand in hand.

During the reign of Emperor Charlemagne (800 A.D.) bright children were sought out from the common people and educated at special academies (Whitmore, 1980). Later, a Turkish magnate scoured the Empire in search of bright and talented children to be brought to the palace for special educating. Kitano (1986) states, "Gifted Christian youths were given intensive education. They were considered prized assets in the building of the Ottoman Empire." Kitano researched various civilizations and found that the Chinese of the Tang dynasty (618-906 A.D.) revered giftedness. They valued literary skills, leadership, reasoning, and perceptiveness. Their recognition of differences between gifted individuals and the need for special training was basic to their attitude toward improving their culture. Kitano states, "The gifted were nationally supported in an effort to prevent the potential waste of talent".

Horowitz (1985) describes the "Age of Reason", (the Renaissance, 1300-1700 A.D.) as a time when culture was encouraged by the European rulers and aristocracy. Aesthetically gifted individuals such as Dante, Michelangelo, and da Vinci were much in demand for their talents. The intellectually gifted thinkers of this era, Copernicus (1477-1543), Galileo (1564-1642), and Newton (1642-1726) gave credence to the importance of abstract reasoning and intellectual manipulation.

Attitudes toward differences among individuals gained attention from Darwin's *The Origin of the Species* in 1859, and Mendel's genetic theories in 1865. Darwin believed that the skills and attitudes
acquired in one generation could be passed on by way of genetics (Horowitz, 1985).

Tannenbaum (1983) states that Sir Francis Galton was generally regarded as the first author to offer heredity as the prime determinant of intellectual functioning. Galton's *Hereditary Genius* in 1869 studied British families and hereditary characteristics. Later Galton founded the "eugenics" movements which sought to improve society by curtailing reproduction among any recognized low-functioning groups (Kitano, 1986). Horowitz (1985) credits Galton with introducing statistics to the Social Sciences, establishing psychometrics as the leading method for assessing individual differences in mental capacity, and finding that the distribution of ability followed kinship patterns. Galton also sought to dispel the general belief that men of genius were, in the main, puny, unhealthy, and weak-sighted. Horowitz quotes Galton as concluding, "I do not deny that men of extraordinary mental gifts have had wretched constitutions but deny them to be an essential or even usual accompaniment" (p. 332).

Gallagher (1975), Whitmore (1980, Swassing (1985) and other authors in the field state that the work of Lewis Terman, upon adapting the testing measures of Alfred Binet (1916), created the foundations of current attitudes toward the gifted population. Gallagher (1975) relates that Terman, using his own Stanford Binet Intelligence Test began a longitudinal study of a group of teacher-referred high achieving individuals drawn from the California
school population. Gallagher quotes Terman's recollection as, "My dream was realized in the spring of 1921 when I obtained a generous grant from the Commonwealth Fund of New York City for the purpose of locating a thousand subjects of IQ 140 or higher" (1954, p. 222). These studies continued through the 1950's and have subsequently been carried on by other disciples of Terman. Gallagher credits Terman's findings with having exploded the myth that gifted children were weak, unpopular, and disturbed. Terman's subjects subsequently improved their relative status on mental ability test scores in adulthood. His work was reported in a five-volume series titled, *Genetic Studies of Genius* (1959).

Whitmore (1980) refers to the Terman research as having created the "Era of IQ Test Dominance", during which time attitudes toward giftedness centered around those well-rounded high achieving students who consistently scored high on any achievement or aptitude test. Swassing (1985) supports Terman's contribution to the field of gifted research, but suggests that other authors such as Witty had questioned Terman's method of subject selection. Witty pointed to the fact that Terman's subjects had come from high, middle income families, had lacked minority group representation, and were based on a narrow definition of giftedness, the IQ score (1951). Tannenbaum (1983) however, was satisfied that Terman had demonstrated that the IQ, taken at an early age, could be used to predict superior adult achievement.

Gallagher (1975) cites that both Terman and Leta Hollingworth were concerned in their research for the emotional and social adaptability
of children with IQ's above 180. These unusually gifted children who might number only one in a million would find it difficult to find peers to whom they could relate. Swassing (1985) states that Hollingworth's studies emphasized the very special needs of the high IQ child. Tannenbaum (1983) considers Hollingworth to be a pioneer in the gifted field who influenced educators to consider enrichment over rapid advancement in curricular choices for gifted children. Carrol's work *Genius in the Making* (1940) was cited by Whitmore (1980) as a major contribution of this time. This text was considered to be a guide to recognizing, understanding, and fostering the development of intellectual giftedness in children. Whitmore also states that Hollingworth (1934) and Witty were conducting studies on gifted characteristics. Witty (1951) published a comprehensive work titled *The Gifted Child* which served to increase national interest in gifted education and enhanced the attitudes that bright minds should not be wasted in the schools. Tannenbaum states, "Thus, we see the beginnings of a swing back to caring about gifted children and their education as America entered the 1950's". (p. 15)

Numerous authors were publishing works on giftedness in the 1950's and early 1960's. The attitude of curiosity had become one of intense interest. Whitmore (1980) describes the works of numerous authors and cites many studies done during this time. Terman and Oden (1959) published the fifth volume of their studies on gifted populations growing up. Bruner (1960) published his concerns for the appropriateness of the school curriculum for gifted children. This
was also the period that saw Bloom's Taxonomy (1956), Guilford's Three Faces of Intellect (1959), Taba's Sequential Questioning Techniques (1962), and Suchman's Three Stages of Discovery (1961) added to the body of literature contributing to the field of gifted education. E. Paul Torrence (1962) was writing on the benefits of rewarding creative behavior in the classroom. Passow (1962) and Gallagher (1960) were doing early studies on whether gifted children were taught best by segregation or by mainstreaming them into the regular classroom.

Research on gifted education continued through the 1960's and into the 1970's even though national interest had turned toward the Civil Rights movement as well as toward concern for the handicapped. Guilford's Structure of the Intellect model (1967) drew interest as schools searched for low-cost methods of identification (Whitmore, 1980, p. 54).

One of the more prolific authors and researchers on gifted education, Joseph Renzulli, at the University of Connecticut has published numerous works. His 'Three Ring' definition of giftedness includes overlapping clusters of traits, requiring educational opportunity (Swassing, 1985). Renzulli's Enrichment Triad (1977) lists three types of activities that enrich the educational process. These include:

1. Exploratory activities on a casual basis
2. Training activities in preparation for in-depth study
3. Individual and small group investigations of real problems

Renzulli has also developed a checklist, The Scales for Rating the Behavior Characteristics of Superior Children (1976). An
identification model known as the Revolving Door Identification Model has become popular in gifted programs since it deals with a broader talent pool of students with above average ability and creativity (Swassing, 1985, p. 239).

One of the more well known advocates of gifted education, Dr. James Gallagher, professor at the University of North Carolina, has written and spoken widely on the need for special curricular options for the academically gifted child. His textbook, *Teaching the Gifted Child* (1975, 1981, 1985) has been widely used in gifted education programs. Gallagher, as well as other key authors, researchers, and advocates of gifted education are located primarily at major universities.

From the literature it appears that attitudes toward gifted programs have also been enhanced by various national organizations. The Coalition for the Advancement of Gifted Education (CAGE) is a national organization comprised mainly of the leaders of major gifted education support groups. CAGE appears to play a major role in national issues affecting gifted education. Another organization, The World Council for Gifted, conducts major conferences every two years for the purpose of expanding new concepts and research in the field of gifted education.

Studies show that national and international support are necessary to ensure positive attitudes toward gifted populations and programs. History has shown that those attitudes, while in early times were unclear, have improved and today enjoy a very broad base for continued improvement.
C. An Historical Treatment of Contributing Authors to the Field of Educational Administration

Early theorists in the field of administration wrote on how organizations should function to be efficient, how to operate economically, and how to get maximum performance from the workers (Owens, 1981). They were not concerned with psychological factors or worker motivation and satisfaction. Their attitude toward management was in the classical sense; that administrators manage the company and workers perform the tasks. There was a decided gap between labor and management (Hoy, 1982).

Frederick Taylor (1911) was an early theorist who wrote on scientific management and described four basic principles of management:

1. Break jobs down into a series of small, related tasks.
2. Train workers for a specific job.
3. Establish a division of labor apart from management.
4. Create disciplinary codes.

His ideas led to performance evaluation, incentive pay systems, and strict discipline. Owens (1981) states that for Taylor, efficiency and low-cost production were most important.

Guthrie (1986) summarizes the views of Taylor when defining the rational approach to management: "Organizational productivity can be increased through the use of time and motion studies and by providing economic incentives for workers" (p. 57). Owens (1981) gives Taylor credit for having impacted American management of all kinds.
Henri Fayol (1916), a French industrialist, was part of the scientific management influence. He differed from Taylor's emphasis on mid-management by offering five functions of the higher levels of management. These were: to plan, to organize, to command, to coordinate, and to control. Fayol believed that well-trained administrators were necessary for organizations to improve (Owens, 1981). He emphasized flexibility, being able to adapt to different situations, and maintaining a sense of proportion. Campbell (1977) states that Fayol was a major contributor to the job analysis approach to administration and stressed organizational processes while ignoring individuals. In later life, Fayol became a teacher of administration.

Elwood Cubberly (1916) was one of the early authors whose attitudes toward administration contributed to later developments in training school administrators. Owens (1981) states that Cubberly held to the position that schools were factories in which the raw materials were to be shaped and fashioned into products to meet the various demands of life. Cubberly was known for his "enlightened leadership" theory wherein school administration would be based on scientific inquiry (Cunningham, 1977). Superior efficiency of trained experts who would possess autonomy, was part of this philosophy. Cubberly felt that the school administrator should keep his plans and policies only to himself. He also was confident that in time the superior efficiency of trained experts would persuade state legislatures to require specialized certification for school administrators (Cunningham).
Hoy (1982) includes Max Weber in the group of classical theorists, although Weber was primarily concerned with the aspects of bureaucracy. Weber's early contributions were around 1918 when he discussed the hierarchy of authority. Authority was viewed as the probability that certain specific commands would be obeyed by a given group of persons. This was seen as voluntary compliance being associated with legitimate commands. Authority, according to Weber could be charismatic (personal mystique), traditional (inherited by position), or legal (by law). Owens (1981) describes the Weberian bureaucracy as a rational system for the efficient management of complex organizations. Well-run bureaucracies would be efficient, fair, impartial, and predictable, according to Weber. School administration theory was strongly influenced by the early classical theorists (Campbell, 1977).

Luther Gulick (1937), while one of the later classical theorists on organizations, contributed to the universal principles of administration in his writings concerning the essential need for the division of labor. The specialization and effectiveness of worker performance were felt to be necessary. Gulick envisioned pyramid shaped structures for power and authority. Hoy (1982) describes the famous mnemonics of Gulick, the "POSDCORB", as a means for remembering the function of administration: the seven procedures – planning, organizing, staffing, directing, coordinating, reporting, and budgeting. Gulick was interested in worker effectiveness, span of control, and grouping workers into departments, much as schools
grouped for specialization, supervision, and departments (Hoy 1982).

Owens (1981) describes the period of scientific management through 1935 as a time when school administrators were taught the basic rudiments of managing a school system. Economic and technical studies were used to analyze the job done by school administrators. The period following the scientific and classical theorists domination of administrative theory became known as the Human Relations period. Mary Parker Follett (1924) is described by Hoy (1982) as emphasizing the development and maintenance of harmonious relationships. Conflict was seen as a normal process by which socially valuable differences would register themselves for enrichment of all concerned. Owens (1981) relates that Follett thought it was better practice in an organization that one person would not give orders, but that all workers would respond to a situation. Administrators would deal with conflict by use of power, compromises, and the coordination of resolutions. She developed sound principles of administration founded on coordination of conflict through management. She was the first theorist to deal with the human side of administration (Hoy, 1982; p. 5).

The Hawthorne studies at Western Electric were conducted in 1932 to determine the productivity levels of workers when different lighting intensities were introduced. The unanticipated results of the study showed that workers responded positively when they recognized they were being studied. They performed better in a test situation. Questions of motivation, fatigue, and human variability
became important. Owens (1981) states that the Human Relations movement emphasized the human and interpersonal factors for administering organizations.

Owens (1981) describes American education as little effected during this time, in stating:

"Superintendents of schools continued to emphasize concerns for such concepts from the classical views as hierarchical control, authority, and formal organizations, while supervisors emphasized to a much greater extent such human relations concepts as morale, group cohesiveness, collaboration, and the dynamics of the informal organization." (p. 20)

Top management sought to maintain authority, while mid-management sought ways to encourage participation in decision-making and open communication. Owens suggests these differences persisted into the 1980's.

The works of Barnard (1938) and Simon (1947) gave rise to organizations paying more attention to the welfare of their workers. These early behaviorists introduced the informal aspects of an organization. Barnard, an industrialist, introduced concepts that had major influence on the theories of administration. Owens (1981) states, "Barnard illuminated the crucial importance of better understanding of the relationship between the formal organization and the informal organization. Administrators must attend to the needs and aspirations of the workers as well as those of the organization."

Barnard (1938) was concerned with effectiveness and efficiency. Effectiveness was defined as the accomplishment of the recognized objectives of cooperative action. Efficiency was the ability of the
organization to sustain worker cooperation by use of material and social benefits. Campbell (1977) defines Barnard's efficiency as the satisfaction that one receives from belonging to an organization. Campbell further elaborates on Barnard's theory that an action is effective if it accomplishes its specific objective and efficient if it satisfies the motives underlying the immediate objective (p. 67).

Lipham (1985) relates Barnard's theory on decision-making to effective school principals: "The fine art of executive decision-making consists in not deciding questions that are not pertinent, in not deciding prematurely, in not making decisions that cannot be made effective, and in not making decisions that others should make" (p. 86). Lipham states that effective principals are aware of problems that need to be solved and decisions that must be made. They use awareness information.

Simon's work, Administrative Behavior (1947), more than any previous work established a new concept of administration and set the pace for social and behavioral scientists. Simon was concerned with the importance of human behavior in decision-making. Owens (1981) credits Simon with the theory that administrators 'satisfice' or use satisfactory alternatives rather than optimal or best solutions (p. 22).

Campbell (1977) states that Simon was concerned for communication within an organization. The greater the communication, the greater the efficiency. Administrators must be good communicators (p. 161). Owens (1981) states that for Simon, the conditions of a situation
should be taken into account when attempting to make a decision using facts as well as human limitations. Organizational decision-making specifies the worker's function, allocates authority, corrects wrong decisions, and enforces limits. Simon's analysis of the administrative process had a unity and coherence which had been absent in earlier theories (Owens). Lipham (1985), using Simon's theory on the selection of optimal alternatives states:

Effective principals must sense the point at which they have sufficient information to justify action. This calls for a certain amount of judgment, but it also involves skill, and thus skill may be improved through training and experience (p. 93).

The period following Barnard and Simon was the beginning of social awareness and behavioral theories. Getzels and Guba (1957) were social systems theorists who described the interaction of the individual with the environment through pictorial representations. Behavior is described as a result of this interaction. The graphic model was devised to show the personal and organizational dimensions of social behavior. Owens (1981) states there is an interplay between role and personality in a behavioral act or decision. A state of equilibrium exists between the needs of the individual and the organization. Owens further states that as long as this state of equilibrium exists, the relationship will be satisfactory, enduring, and relatively productive (p. 79).

Campbell (1977) writes of Getzel's administrative theory that administration may be conceived structually as the hierarchy of
subordinate to superordinate relationships within a social system. This hierarchy of relationships is the locus for achieving the goals in the social system (p. 184).

Hoy (1982) describes the Getzels-Guba Systems Model as defining the individual's roles and expectations within the boundaries of the institution whether a school building, or a legal system. Behavior, then is a function of the interaction between bureaucratic role expectations and the relevant personality needs of the organizational member (Campbell, 1977; p. 62).

Maslow (1954) was an early behavior theorist who wrote on human motivation and personality. Guthrie (1986) states that Maslow described human needs as being expressed in a hierarchical order consisting of five prepotent levels. When a lower level need is satisfied, higher level needs emerge. The lowest needs are physiological (hunger, sex). Next are safety needs or freedom from fear. The third level of needs consists of family, affection, and belonging to a group. The fourth level relates to feelings of self-esteem, respect, and social status. The highest level for Maslow is self-actualization or becoming all that one can become. Maslow's theories of motivation have been extremely influential in shaping management philosophy. Guthrie (1986) suggests that school administrators need to be aware of the various needs of their employees and provide for the higher order needs (p. 215). Owens (1981) states that the self-actualized person is strongly inner-directed, seeks self-growth, and is highly motivated by loyalty to cherished values, ethics, and
beliefs (p. 113). Owens summarizes motivational needs by stating
"Teachers need to achieve feelings of professional worth, competence,
and respect." (p. 114)

Herzberg (1966) was also a theorist who wrote on human behavior.
His Two-Factor theory of motivation has been widely accepted by
administrators (Hoy, 1982). His theory suggests that one set of
rewards contributes to job satisfaction and another separate set to
job dissatisfaction (p. 148). Herzberg's theory is one which uses
'hygiene' factors to describe job dissatisfaction resulting from work
environment and job conditions (Guthrie, 1983). A second set of
motivational factors produce job satisfaction: success on the job,
praise, financial and personal gratification. Guthrie suggests that
both factors are present in a school environment and that the
principal needs an awareness of each one. Hygiene factors serve to
provide motivation to teachers in the form of job security, salary
increases, and positive working conditions. Owens (1981) states that
it is not possible to motivate people through maintenance factors
alone. Reducing class size or painting the room will only create a
situation wherein dissatisfaction may be decreased. Motivation is
not guaranteed. (p. 114)

Another behaviorist, Victor Vroom (1964), also wrote on human
motivation. His Expectancy Theory, according to Guthrie (1986) is
supported by research in such areas as teacher satisfaction, job
performance, productivity, and effective teaching (p. 218). Vroom's
theory develops an association between motivation and expectation of
desirable outcomes. An individual performs in a certain way dependent on how he perceives what the outcome of his actions will be. Vroom states "the probability of a person performing an act is a direct function of the algebraic sum of the products of the valence of outcomes and expectancies that will occur given the act." (p. 276) Valence is described by Guthrie (1986) as the desirability of an outcome. Expectancy is the probability that an outcome will occur. Force is the motivation to perform the act that will cause the desirable outcome. Owens (1981) simplifies this theory by stating that one responds to the needs arising from deprivation and various needs compete for satisfaction. Human behavior is therefore predictable. Vroom's theory assists in predicting job performance and success. One can see that the motivation theories of Maslow, Herzberg, and Vroom explained much about how the individual reacts to the job situation, and what makes him or her perform to expectations.

However, the work of McGregor (1960) in creating Theory X and Theory Y was one of the first recognized attempts to explain the attitudes of administrators toward their employees. Hoy (1982) states that McGregor presented evidence of the importance of one's attitudes in managing one's workers. Theory X assumes that people dislike and avoid work. Therefore, workers need an authority figure to help them perform their jobs. Hoy (1982) states that people resist change and that managers must coerce them into accepting new ideas.

Theory Y assumes on the other hand that people need to work, want to perform well, accept responsibility, and seek self-sufficiency on
the job. Owens (1981) states that motivation is a matter of differing perceptions of what exists in the "real" world. The two theories provide an explanation of differing management strategies and leadership styles. Guthrie (1986) suggests the problem is that there are two very divergent philosophies of management for school administrators. Principals should recognize that staff members often desire to be closely involved in decisions and may possess the potential for making significant contributions to the organization's overall effectiveness (p. 208).

Argyris (1959) followed McGregor's explanation of motivation and leadership behavior with his theory of Behavior Patterns A and B. Owens (1981) describes the theory of Agyris in that Behavior Pattern A is characterized by no-nonsense, strongly directive leadership, tight controls, and close supervision. Behavior Pattern B uses persuasion, paternalism, and human dynamics. Behavior Pattern B is characterized by mutually shared objectives, high levels of trust, respect, job satisfaction, and open relationships. Pattern B leadership can be called 'collaborative' (p. 51).

In the area of leadership effectiveness, Argyris (1976) emphasizes the need to develop harmony and consistency between the goals of the organization and the motivational needs of the people. Owens (1981) states that for Argyris the individual has his own personality and goals while the organization has its own needs and goals. The two may be incompatible. The job of the administrator is to promote harmony. Argyris also has developed models for training administrators using
specific situations and analyzing various solutions, called Model I and Model II theory.

An additional behavior theorist, Rensis Likert (1967), also developed theories related to management strategy and behavior. Guthrie (1986) compares Likert's Management System I through System IV to McGregor's Theory X and Theory Y. At Level I (System I), management has little trust or confidence in the workers. Systems II and III, progressively lead to the ultimate situation in System IV where managers have full confidence in the workers and invite them into the decision-making process, much as in Theory Y. Guthrie states that System IV is more likely to be successful in a school setting. Likert developed his four managerial systems for business, but Hoy (1982) indicates these may be adaptable to school situations. The systems are described as being: Exploitative-authoritative, Benevolent, Consultive, and Participative. Likert's systems, according to Hoy, now include eight variables: leadership processes, motivational forces, the communication process, the interaction-influence process, the decision-making process, goal setting, control processes, and performance goals and training (p. 194). These variables can be used to measure the degree to which an organization falls within the definition of System I to System IV on managerial characteristics. Likert's instrument, "Profile of a School," is adaptable for use by school administrators to measure school climate (Hoy, 1982).

One of the key persons in the advancement of the science of educational administration was Daniel Griffiths. His work,
Administrative Theory (1959), was widely used in assessing the nature and content of organizational management. Owens (1981) discusses the contributions of Griffiths to social systems theory. In this theory, organizations exist within larger systems, possessing internal subsystems themselves. The various systems interact tangentially, with the environment, with each other, and yet maintain their identity. For Griffiths, administration is a generalized type of behavior to be found in all human organizations. It is the process of directing and controlling life in a social organization (Owens, 1981; p. 65). The decision-making process becomes the central function of administration.

Griffiths contributed to Cunningham's work (1977) in which he discusses preparation programs for administrators. Within his chapter, Griffiths discusses issues confronting school administrators, pressures, tasks, and the administrator's role in promoting change. He describes the various segments for training programs with more emphasis on practical issues than theoretical. He summarizes his thoughts by stating,

The concepts, research findings, and theories selected should be those that help an administrator analyze the setting in which he works, establish goals, make use of other people in meeting these goals, develop morale, and build into the organization provisions for change. (p. 431)

Theories of leadership were greatly effected by the work of Fiedler (1967). His contingency theory of 'no one best way' to provide effective leadership has been explained in numerous texts.
Owens (1981) describes Fiedler's theory as the classic view of behavior, in that it arises from an interaction between personality and the situation. The leader's motivational structure and his assessment of the favorableness of a situation, are necessary to achieving important goals (p. 160).

The contingency approach attempts to predict which type of leaders will be effective in different kinds of situations. Effective leadership is a function of the interaction of leader behavior and situational variables (Hoy, 1982). Fiedler developed a simple personality measure called the "Least Preferred Co-worker" (LPC). The LPC scale measures the individual's attitudes toward different types of persons (p. 236). Guthrie (1986) states that effectiveness is a function of the leader's style. LPC scores have some limited predictive value. Lipham (1985) states that LPC scores can be used to match group characteristics with the leader's strengths. This approach is helpful to principals by providing a method to improve leadership behavior (p. 66). Owens (1981) summarizes Fiedler's LPC theory by stating, "The goal of leader training would be to provide individuals with the skills that enable them to increase the favorableness of the situation in terms of their leadership style.

Four outcomes of such a program should teach:

1. ways of getting along better with subordinates
2. ways of handling administrative routines more effectively
3. a strong technical background
4. how to assess the favorableness of various situations" (p. 165)
James D. Thompson (1967) contributed to the understanding of how organizations operate and, along with Karl Weick (1976) theorized on the structural organization of schools. Owens (1981) discusses Thompson's theories of uncertainty that organizations face in anticipating problems. Organizations have a technical core of workers who perform necessary functions and have boundary-spanning or overlapping functions as well. They deal with environmental factors, especially with uncertainties, and make people interdependent with reciprocal coupling devices. Owens discusses "pooled coupling" as situations in which individuals share resources, but otherwise work independently. For schools, the principal may deal with hostile groups of parents, and in doing so, is a boundary-spanning unit protecting the teacher as the technical core from the environment.

Weick (1976) wrote about organizations as loosely-coupled systems, in that there are subsystems loosely tied together, rather than through bureaucratic linkages. These subsystems are related to one another, but each retains its own identity and individuality. Owens (1981) describes schools as loosely coupled systems under Weick's theory, having little interdependence from one department or office to the next. In schools there may be loose control over how well the work is done and therefore infrequent administrative inspection of instruction (p. 34). Owens (1981) summarizes this organizational theory by stating, "Organizations that are expected to respond and adapt to emerging problems in an environment of change will effectively use the more flexibly structured methods of teamwork,
collaboration, participation, and integration effort." (p. 34) The theorists cited herein appear to have made significant impact on the scope and sequence presented in many textbooks, and therefore in the content of preservice programs for school administrators. Attitudes of both teaching professor and learning administrator have certainly been greatly influenced by these authors.
D. Studies of Attitudes Concerning Preparation Practices for School Principals

During this same period that theorists were writing widely on organizational structures, management techniques, and motivational factors of human behavior, university preservice programs for principals were also undergoing significant change. Cunningham et al (1977) published a volume of readings which included a chapter by Robin Farquhar, concerning changes in these programs.

In 1947, the National Conference of Professors of Educational Administration (NCPEA) was formed, with the advancement of educational administration as a specialized field for professional study, as its primary emphasis (Farquhar, 1977). This organization, along with the American Association of School Administrators (AASA) in 1956, cooperated in the forming of the University Council for Educational Administration (UCEA). The UCEA soon became a recognized force in a national network of universities and related organizations to enhance the field of educational administration research and study. Numerous advancements, including the concept of an internship training program were developed through the efforts of UCEA and NCPEA. Farquhar relates that the development of educational administration as a self-conscious field of professional preparation is a relatively recent phenomena. In the early 1950's, programs in educational administration consisted largely of summer sessions, with professors recounting their experience, and with little research into the process or theory of administration (Farquhar (1977). In 1954 the NCPEA with
assistance from AASA and funding from the Kellogg Foundation laid plans for the creation of UCEA at Columbia University and in 1956, UCEA centers were formed. The Ohio State University under Dr. Jack Culbertson became one of the national leaders in the UCEA movement.

Farquhar (1977) states that the social sciences were discovered as a source of theories and concepts that have some relationship to administrative behavior in organizational settings such as schools and school systems (p. 333). Research became substantially more sophisticated, new knowledge was generated, and theory, related to educational administration was refined. Social sciences were incorporated into preparatory programs and increased emphasis was given to field-related experiences. This expansion of the training programs continued through the 1960's and into the 1970's. Concise work in the technological sciences, business administration, humanities, and human relations were all viewed by different program designers for inclusion into preparatory programs. Farquhar describes the development of preparatory programs for principals as follows:

The program purposes shifted from imparting administrative tasks and processes through an applied behavioral science approach to a demonstrated competency level. Program content changed from professional experiences to competency-oriented problems modules. The lecture and textbook format was replaced by seminars, workshops, and independent study. In the future programs designers will focus more intensively on the identification of the analytical competencies required in administrative behaviors. (p. 353)
Griffiths (1977) discusses preparation programs for administrators, relating behavioral science concepts as helping administrators: analyze the work setting, establish goals, make use of people in meeting these goals, develop morale, and build provisions for change into the organization. Griffiths would have administrators study the tasks of administration based on research and theory, and then branch off for clinical experiences, capped with a lengthy internship under a skilled practitioner. An integrative seminar of a group of student-principals is also recommended by Griffiths (p. 433).

Lipham (1985) states that most preparatory programs now attempt to ensure that training or experience provides principals with an understanding of basic administrative and educational theories. Lipham supports Griffiths evaluation of programs by stating, "Courses and seminars in educational administration have been upgraded to include simulation, role playing, and case analysis techniques. The advantage of these techniques are to improve instruction, work with staff and parents, and improve school-community relations" (p. 295). Lipham supports a strong inservice training program for helping practicing principals improve their daily performance. Mitchell and Cunningham (1986) also support strong inservice programs for principals through academies such as the Ohio Academy for School Improvement Strategies (OASIS). These academies, according to the authors have the potential to provide a wide range of services to principals.

In summary, one can state that the content, format, and philosophy of programs for training school principals to perform efficiently and
effectively have been influenced by a plethora of theorists and practitioners. Preparatory programs have been shaped by the writings of early and contemporary theorists as described; by the teachings of research-oriented university professors who studied the theorists; by the implications and findings of doctoral dissertations of student-researcher-administrators; by existing conditions within the field of school administration; by national publications, journals, and published textbooks in the field of educational administration; by federal legislation and state mandates; by national events and crises; and by the very simple fact that school administration theory evolved as the need for change brought about change.
E. Studies of Various Models of Preservice Preparation Programs for School Administrators

Preservice training programs from various universities were researched at The Ohio State University Library in an attempt to determine common features. Programs reviewed were located at the universities of Arizona, Connecticut, North Carolina, Ohio State, Virginia and the Teachers College at Columbia. Common elements of the various program requirements included: two years of teaching experience, an on-campus residency, a satisfactory score on the Graduate Records Examination (GRE) or the Miller Analogy Test, letters of recommendation, a current teaching certificate, a specific grade point average, a typed narrative illustrating the candidate's writing style, and completion of a written examination at the conclusion of the program. Most programs also require an internship or a paid learning experience with a school administrator. All programs reviewed offer advanced degrees at the masters level through the doctoral level. Each university studied also offers the doctoral degree in gifted education. The core requirements in each program vary according to local determination. All programs, however, contain the ten areas surveyed by Section III of the Principal's Questionnaire in this study.

Due to the state of Arizona's large bilingual population, the University of Arizona stresses administrative skills in Spanish. Indian education programs are also a part of their training program. Core requirements include the history and philosophy of education,
along with sociology and theories of administration. The University of Arizona lists a course in the study of exceptional children incorporated with program preparation options for school principals. Few other programs have this provision.

School administration program offerings at the University of Connecticut provide a concentration of independent research, lectures, and seminars on special topics. Specific topics addressed in the program include: conflict resolution, educational policies, time management, budgeting and resource management, business administration in education, systems analysis, organizational structure, policy development, supervision, evolution, planning, and the dynamics of administrative roles. The core curriculum is required as are other standard entrance and graduation requirements.

The University of North Carolina at Chapel Hill offers three levels of educational administration preparation. Level I requires 30 semester hours of graduate studies and a written examination. Level II candidates complete 60 semester hours of graduate study. Level III is the doctoral program wherein the candidates complete an intensive program which includes a field study, an internship, the administrative core requirements, independent research, and the dissertation. The doctoral program can focus on the needs of the practitioner, the college teacher, or the research specialist.

The Ohio State University Department of Educational Administration faculty recently (in 1985) revised its program leading
to administrative certification. The new program focuses on: instructional inquiry and leadership, general managerial and administrative tasks, clinically-based learning experiences, and nine well-defined learning themes. These themes include: promotion, facilitation, and assessment of learning; equity in schools; emphasis on the importance of the individual; the function of knowledge; curriculum and instruction; effective and efficient performance; decision-making; and the ethics of leadership. Core requirements center around educational administration foundations, supervision, and the politics of leadership. Administrative functions now include coursework in computer technology and collective bargaining. Opportunities are also provided for field-based experiences. Instructional leadership specialization is required. Various program options are tailored to the interests of the student, including human relations or educational change.

Programs in educational administration at the University of Virginia are designed to meet the individual career goals of the administrator. The masters degree incorporates the requirements for the position of school principal. The Ed.S. or specialist degree trains administrators for higher level supervisory and central office roles. The doctoral program is designed to offer the highest level of specialization in the field of educational administration.

As with other universities studied, Virginia's program entails individual planning, an internship, computer technology, and a final written examination. Coursework includes the core requirements of:
theory in administration and organizations; school law, finance, plant planning, personnel, and politics; courses in supervision, evaluation, curriculum, and community relations; labor relations and collective negotiations. The program selected is contingent on goal aspirations of the individual.

At Teachers College, Columbia University, the program in educational administration concentrates on leadership training. There is an emphasis as well on research and inquiry. The four areas of specialization include: informed leadership; organizational behavior; management systems; and analysis of institutions and policies. The program has a competency-based plan of study. Course offerings include general educational administration and research, leadership seminars, internships, and independent research.

Although the programs studied are very similar in their entrance qualifications, core curriculum, and field experiences, each program is uniquely different. Each seems to stress its own philosophy of educational administration. Columbia University stresses leadership training; the University of Virginia, career goals; Ohio State University stresses nine learning themes, while The University of Arizona offers bilingual, multicultural experiences.

Cronin and Iannaccone (1973) compared the educational administration programs at Harvard University and the University of Chicago. Social sciences were known to play a part in the training of principals. The core curriculum was infused with insights from sociology, psychology, and political science. However, each
university program remained unique and maintained its own philosophy of training administrators.

Assessment of the literature reveals that while each university faculty must determine the structure of its preservice program for principals, the faculty must also decide which content model will be emphasized. There are numerous program models cited in the literature. Five of the more common models were selected for this study. Those models commonly used are:

A. Administration in terms of instructional leadership
B. Administration in terms of staff development
C. Administration in terms of human resource development
D. Administration qua administration
E. Administration in terms of the effective schools

Each of these models is unique. Yet, commonalities of organization and content are found in all five. The principal is the key to each model.

Some preservice training programs may use a general theory of administration, known also as the administration-qua-administration model (Orlosky, 1984). Within this model a series of fundamental propositions are offered. General theories, concepts, and constructs are translated into behaviors and skills that may be appropriate for various administrative positions. There is a basic theory of transfer of knowledge for all administrative functions.

Barnard (1938) and Simon (1945) espoused general theories of administration that defined skills basic for all administrators.
Lichfield (1956) also offered a general theory of administration. Orlosky (1984) concludes that concepts applicable to administration generally may be called G-factors, and that special conditions produce S-factors. Together these factors assist administrators in the process of problem solving. Orlosky also indicates that a general theory of administration may only be approached, but not achieved for the total field of administration.

A training model which is built around human resources administration concepts would train school administrators in all phases of securing appropriate school staff. This would include the conditions of employment, from initial appointment to termination (Guthrie & Reed, 1986). Such functions as recruitment and selection usually fall with central office administrators. However, the processes of induction of new employees, daily supervision, performance evaluation, and staff development through inservice, will normally be the responsibility of the site administrator, the principal.

Within the human resource development model, the principal assumes a mentorship role in the skill development of the staff. Principals schooled in this model would be encouraged to provide direct reinforcement and feedback to the teachers. Principals would create readily available learning opportunities, would instill confidence, and express concern for the teacher's career success (McPherson, 1986).
The human resources administrator, according to Guthrie & Reed (1986) would be concerned with effective staff development, inservice opportunities, personnel incentives, and working conditions.

Sergiovanni (1980) contrasts human resource administration with human relations management by citing differences in administrator attitudes, permitted participation, and expectations. The human resources model is much preferred since it invites subordinate participation, utilizes faculty input, and increases worker satisfaction.

Knezevich (1984) has stated: "Instructional leadership is one of the most important challenges facing educational administrators at all levels of the hierarchy." (p. 422) Preservice training models which are built around the acquisition of skills in instructional leadership, according to Knezevich, would assure that school administrators understood the quality, quantity and effective delivery of instructional services. Skills to be acquired within this model would include how to motivate teachers, how to procure and allocate required resources, how to stimulate the development of new learning systems, how to monitor and appraise learning outcomes, and how to manage an efficient instructional organization. Other skills which Knezevich considers important in this model include: determining optimum class organization for learning, designing time allocation schedules, and defining promotion standards (p. 425).

Gorton (1983) describes the qualities of an instructional leader as having a strong commitment to education, high energy, human
relations skills, and knowledge of the instructional process. Monahan (1982) states: "Inasmuch as the building level is the place at which the primary goals of the school system are achieved, the principal's first responsibility is the provision of instructional leadership." (p. 262) Gorton (1983) illustrates well the educational vision needed by principals:

Knowledge about the different aspects of the instructional and curricular program, and skill in introducing change in that program, as well as in the people who staff it, are key elements in the expertise that an administrator will need if he intends to exercise effective instructional leadership (p. 266)

A preservice program model designed to emphasize administrative emphasis on staff development would be defined according to Hoyle (1985):

Staff development is a process designed to foster personal and professional growth for individuals within a respectful, supportive, positive organizational climate having as its ultimate aim better learning for students, and continuous, responsible self-renewal for educators and schools. (p. 146)

Staff development concepts tend to parallel inservice needs in terms of a long-term commitment. The staff must be involved in needs assessment and planning. Active participation is expected from the principal. An in-house group of teacher-leaders is maintained for training other staff members. Adequate financial support is available to allow staff involvement and the immediate application of objectives (Hoyle, 1985).
Skills acquired from this model would allow the principal to design staff development programs that were carefully targeted to needed individual and group competencies (Orlosky, 1984). Guthrie & Reed (1986) support these concepts of good staff development by stating: "School effectiveness depends on the skills and abilities of the instructional and non-instructional staff." (p. 320)

Principals need to develop a continuing staff development program focused on a wide range of skills, abilities and group needs. The program needs to foster personal and professional growth. There must be an organizational commitment, including budgetary and time provisions. Guthrie & Reed (1986) compare this program to Maslow's self-actualization, need attainment level by stating, "Workers can attain the best that they can be." (p. 320)

Considerable research exists concerning the effective schools model. Often, the literature addresses the question of how to make schools more effective (Brookover, 1982). Other times, the principal's leadership is addressed as the key factor to effective schools (Hoyle, 1985). Some authors provide lists of characteristics that make schools effective (Orlosky, 1984). Much of the literature however, provides practical, useable suggestions for school improvement.

Much of the credit for the Effective Schools movement is given to Ron Edmonds (1979), a black educator who strove to raise the academic climate in predominantly black inner-city urban schools. Federal grant monies have been allocated through the states to train
principals in the processes of the effective schools model. This model contains many key elements of the other models described. In an effective school situation, the principal has direct responsibility for ensuring the following conditions:

1. Strong instructional leadership is provided by the school principal.
2. A climate conducive to learning exists within the school.
3. Instruction in the basic skills is the primary goal of the school.
4. Teachers expect all students to reach appropriate levels of achievement.
5. There is a system for monitoring and assessing pupil performance, which is tied to instructional objectives. (Edmonds, 1979)

Tomlinson (1984) states that effective schools call for persistence, standards, organization, and an uncompromising demand that both teachers and pupils focus their energies on achievement (p. 111). Tomlinson also states: "Good schools impose the conditions that produce learning." Orlosky (1984) cites four variables that also contribute to effective schools: "Collaborative planning and collegial relationships are requisites; there is a close identification with the community; clear goals and high expectations have been set; there is order and discipline" (p. 114).

Zorn (1984) in reflection of his school district's decision to provide a comprehensive program for gifted and talented children states: "This program was brought about by the school system's total commitment to offer an effective, comprehensive, instructional program in grades 1-12 for all pupils." (p. 27)
The works of Brookover et al (1982) offer principals a comprehensive staff development program in the effective schools model. The principal needs to provide an effective learning climate, set high expectations for learning, organize and ensure effective instruction, and obtain parent involvement. Skills for successful school administrators, described by Hoyle (1985), would include segments, if not all of each of the five models as components of an effective school.

The authors of the Bank Street College document (1982) state: "An effective school is seen as the optimum learning environment for facilitating the cognitive, affective, social, and aesthetic development of all students. One of the chief determinants of the effectiveness of a school is the principal." (p. 2)

Lipham (1985) states: "Whether principals make effective schools or whether schools make principals effective has been debated, but the effectiveness of principals and their schools is intimately related." (p. 295)
F. Studies of Attitudes Toward the Skills and Knowledge Needed by School Principals

Authors have been concerned about the skills and knowledge needed by school principals to work with exceptional children for several years (Bullock, 1970; Raske, 1979; Nevin, 1979; Davis, 1980; Leibfried, 1984; McPherson, 1986). Much of the literature has centered around mandates brought about by the passage in 1975 of PL 94-142, the Education for all Handicapped Children Act. Educators were concerned with the many compliance features of this legislation. Liebfried (1984) states, "The deluge of demands created by PL 94-142 has not fostered very positive attitudes toward special education legislation among some educators." Federal and state court decisions have changed many accepted administrative practices for handling problems with a special education basis. Much of that case law has by now been written into current textbooks (Orlansky, 1984; Kitano, 1985; Horowitz, 1986).

Today, programs for exceptional children are well-established in all 50 states. Bullock (1970), however, recognized that school administrators lacked specialized training relating to the education of exceptional children and cited that prior to 1970 no states required special education training for school principals. Bullock recommended that universities require specific courses, that state departments of education set up certification standards, and that school districts devise intensive inservice training programs in exceptional child education for school principals.
Davis (1980) supported Bullock's concerns in a study of all school principals in the state of Maine. Davis states: "Public school principals throughout the country are being required to assume increasingly greater responsibilities for the educational programs of handicapped children within their schools." Less than half of the principals surveyed had taken any course-work in special education. Attitudes of principals toward exceptional children, including the mainstreaming process were also cited by Davis as being effected by the lack of university training in special education.

Raske (1979), noting that school administrators were spending nearly 15% of their time on special education tasks, recommended that state legislatures mandate at least one special education course be taken by general education administrators. Inservice workshops were seen as beneficial to principals to learn to deal with special education problems.

Nevin (1979) studied principals in Vermont and also university faculty, relating to competencies needed by principals to implement special education programs. Nevin states, "The responsibility for the development, implementation, supervision, and evaluation of educational programs for special learners lie with present public school administrators". Principals were noted as not having the skills to assist special teachers in planning, monitoring, and evaluating the exceptional child's educational program. Knowledge and technical information were lacking which would allow advocacy and leadership for the principal.
Stile and Pettibone (1980) reported that although half (51%) of the states offered courses in special education administration, only 12 (24%) actually required general education administrators to take any special course-work for certification. In 1987, that pattern has not changed, as is indicated by this researcher in current investigation, described in the research findings. Also, in 1980 Dickson wrote that the principal plays a fateful role in the development and implementation of mainstreaming efforts and IEP's. Principals were found to be at a distinct disadvantage when they attempted to chair IEP meetings. Limited background in special education made the task more difficult.

Perhaps one of the more comprehensive documents reviewed, relating to the skills and knowledge needed by building principals to work with special programs, was produced by the Bank Street College (1982) under a grant from the U.S. Department of Education. This publication describes the functions of an effective principal based on acquired knowledge, values, and attitudes concerning special programs. Performance in effective leadership is measured by a checklist of exhibited actions and activities. Traits of empathy, integrity, honesty, creativity and imagination are among those considered. Competencies include skills in staff development, appropriate instruction, communication and evaluation.

A paper by Abernathy and Stile (1983) addressed the ability of principals to evaluate special education teachers. A statewide survey of principals in New Mexico revealed a need for further training on
seventeen different factors relating to special education. One of those factors was gifted education. In this study, gifted education is incorporated with areas of handicapping conditions. Additional knowledge and training in gifted education was given a high need rating by principals.

Prince (1984) sought to have principals determine what type of assistance should be provided for individual pupils to ensure desirable learning. Prince determined that the principal's formal training should produce effective leadership and curriculum skills. This would include reinforcing teachers' skills in effective instructional techniques. Olivero (1982) states that most principals believe their preservice programs did not provide them with the background required to function with excellence on the job. Olivero cites inservice programs as a viable method to help principals improve their skills and knowledge.

Leibfried (1984) assesses the principal's need as that of setting priorities. The principal must keep abreast of changing policies, recognize the need for appropriate inservice, maintain open lines of communication among teachers, parents, and community members. Most importantly, the principal must demonstrate a positive attitude in support of the special education program.

Dissertation studies investigating the skills and knowledge needed by principals to administer special programs housed in their buildings were done by Hubbard (1975), Lee (1979), Brown (1982), Bugge (1982), Cook (1984), and Mize (1984).
Hubbard (1975) concluded that current college coursework did not effectively prepare principals to make appropriate placement decisions. Attitudes toward exceptional children were shown to be much better when principals had completed some college training in special education and a sufficient amount of inservice training (30 hours) than those principals who had no training.

Lee and O'Neill (1979) developed a training package to assist elementary school principals in gaining additional knowledge and skills in special education administration. Areas of needed proficiency in their study centered around the exceptional child, delivery of services, and supervision. Inservice programs were seen as very beneficial to principals.

A study by Brown (1982) showed that principals surveyed in Iowa had taken little coursework related to special education. Inservice opportunities had filled this void. However, not all principals had been provided inservice workshop experience, and there was no statewide demand to obtain skills and knowledge in this area.

Administrators in small schools in Oregon were studied by Bugge (1982). These administrators, working in isolated areas, had little access to technical assistance. Therefore, the local principals used whatever knowledge and skills they had acquired to implement new programs.

Findings by Cook (1984) supported earlier research regarding the level of skills and knowledge possessed by principals in the area of special education administration. Principals surveyed by Cook
indicated a very minimal level of special education coursework completed in their college training. Most skills and knowledge were gained through inservice and on-the-job experience. A wide disparity between individuals was also found relating to the number of hours of inservice training completed. Recommendations from this study included: the need to stress inservice at the local level; the need for colleges and universities to modify existing courses and add courses relative to special education administration; the need for support personnel to assist the principals in resolving special education problems.

Mize (1984) conducted a comprehensive study of the skills needed by principals in South Carolina to administer programs in special education. A population of 173 educators in South Carolina ranging from classroom teachers to college professors were surveyed. The study revealed that the following skills were considered important to public school principals with special education programs housed in their buildings: skills in conducting IEP placement meetings; skills in administering special education programs; skills in referral testing decisions; skills in recruitment, selection, and evaluation of staff; skills in conducting inservice staff meetings. Other skills needed included communication skills with teachers and parents; curriculum knowledge; skills with school law and budget; school and community relations. Recommendations from the study included: university coursework in special education for principals; planned opportunities for inservice to help principals develop needed skills;
additional dialogue between university faculties and state education departments, school principals, and special education teachers.

While much of the literature written on skills and knowledge needed by principals to work with exceptional populations has related to compliance mandates from PL 94-142, many of these studies cite as a problem the lack of adequate preparation by principals. This lack diminishes the effectiveness of the principal as an instructional leader (Liebfried, 1984). Few of these studies have included the gifted population in their definition of exceptional children (Aberathy and Stile, 1983). However, the research on gifted and talented education skills and knowledge needed by principals has grown markedly in recent years. Studies by Wickstrom (1978), Castle (1979), Peters (1979), Zeilinger (1980) and Webb (1981) are supported by noted authors Passow (1985) and Gallagher (1985).

Implications from a study by Wickstrom (1978) of principals in the state of Iowa were stated as follows:

Elementary principals need an awareness program of curriculum needs, identification procedures, and evaluation of programs for gifted and talented children. Colleges and universities need to require preservice and inservice training in this area. Principals have limited knowledge to develop programs for this population. States and local districts need to develop long range plans to meet the educational needs of gifted and talented students (p. 71).

Castle (1979) studied 29 variables considered to be important skills and characteristics needed by principals who administer gifted programs. State directors, superintendents, supervisors, teachers, and principals were included in the study. It was strongly
recommended that administrators know what is expected of them in their role of supervising gifted programs. Castle states, "School districts need to provide administrators with workshops to upgrade their skills and knowledge in gifted programs; and universities need to revise and update curriculum offerings for students of school administration" (p. 67).

The principal's role in establishing IEP's for gifted children was studied by Peters (1979). It was stated that the principal plays an important role in program development, program implementation, and program evaluation concerning IEP's for gifted programs. The principal is noted as the key leadership person involved in the success of such a program. Principals also need to be more knowledgeable in this area. It was concluded that for principals to be considered as instructional leaders, they must be trained in gifted education. It was recommended that principals be sensitive to the time and commitment required of a teacher to plan appropriate instruction for gifted students. In addition, planned teacher inservice should be provided.

A competency-based handbook for leadership in the administration of gifted programs was developed in a study by Zeilinger (1980). The role of the principal in gifted programs is defined as requiring: skills in planning and leadership; the ability to state clearly the philosophy of gifted programs; the determining of program goals and objectives; skills in the identification of gifted children; the ability to function as an instructional leader; understanding school
finance; the ability to use community resources; being an effective communicator; and the ability to evaluate the gifted program. Benefits from this study include the publishing of the handbook for general circulation, a listing of abilities needed by principals, and clarification of the leadership role for principals.

Conclusions in a study of principals by Webb (1981) in the Fairfax County, Virginia schools were that the closer the contact an administrator had with a program for gifted children, the stronger that support would be. Skills and knowledge needed by principals for staff development was a major concern of this study. High priority was recommended for leadership skills. Webb states:

The principal's recognition of the needs of gifted children and how they attempt to meet them are determining factors in how successful the programs will be. Principals must accept the need for gifted programs, realize their essentiality, and be willing to proceed in terms of their convictions (p. 3).

Gallagher (1985) addresses the skills needed by principals by stating, "Administrators with special program responsibilities for gifted education should be trained in using appropriate screening instruments, in writing the goals and objectives for the gifted and talented programs, in various designs of inservice training, and in program evaluation." (p. 408)

Administrative leadership was a seminar topic at Columbia University by A.H. Passow (1985). Skills and knowledge needed by principals included: curriculum planning, staff inservice, monitoring progress, and creating a positive school atmosphere. Passow states,
Good administrative practice makes possible the involvement of the faculty, and at appropriate points, the community in arriving at a consensus for program development. Education of the gifted involves that a total learning experience be provided; and in such planning, administrative leadership is absolutely essential. (see Appendix A)

In a study of school principals, Taylor (1984) states, "The more gifted that children are, the more they need a gifted principal." In this study, Taylor explains that principals were provided a checklist of necessary leadership qualities and suggestions for attaining a high level of effectiveness. These qualities included: being well-informed about the needs of gifted children; providing specialized curriculum materials; counseling parents of gifted children; providing enrichment opportunities; and demonstrating advocacy of the gifted program through observable personal efforts. (p. 14)

Competencies needed by principals to function effectively and ensure the success of a program for gifted students are well defined in a handbook by Norton and Zeilinger (1983). They list 12 areas of tasks and competencies from planning, philosophy, goals and objectives to staffing, communication and evaluation. This handbook, would be of value to working principals as a self-measure of leadership competencies.

Cunningham (1977) states, "Principals must be able to develop a positive climate in the schools, be flexible enough to make room for innovative programs and alternative methods of instruction, and sufficiently discerning and aware of the short and long-range needs of society." (p. 84) Cunningham also quotes the American Association of
School Administrators (AASA), in that school administrators must reassess and when appropriate reshape and redesign their leadership role using all the intelligence, insight, and understanding which can be brought to bear. (p. 84)

Cunningham further states that the criterion for the selection of principals should include:

* exhibits charismatic personality
* communicates a sense of social mission
* displays social sensitivity
* shows commitment to educational and social reform
* shows a willingness to take risks, to tolerate ambiguity and stress
* has had work experience outside of education
* has had a strong academic background in technical managerial skills. (p. 89)

Cunningham (1977) concludes with the statement, "The administrator needs not only some knowledge of the science of administration but also some convictions about the ethics of administration. Education must have administrators who are capable of leadership into the future." (p. 91)

Various state plans to develop local gifted and talented programs were reviewed by this researcher, for the purpose of gaining a perspective of the skills and knowledge needed by principals. In January of 1986, the State Department of Education in West Virginia received a comprehensive plan for gifted education from a task force, chaired by Barbara Jones, State Gifted Coordinator. Significant in
this 176-page document are the roles and responsibilities set out for principals and all persons involved with the education process.

For principals, there are 58 different functions required within ten different program components. Knowledge and skills are required in the areas of: philosophy and goals, needs assessment, curriculum, instruction, staffing, program management, evaluation, communication, facilities, and funding. Acquisition of these skills and knowledge would prepare a principal to be an effective leader. The authors state: "Education leaders need to be prepared to show that gifted students need the special services they receive and that those services make a difference in the development of exceptional abilities." (p. 67)

Additional state reports from Delaware, Florida, Kansas, and the District of Columbia were reviewed. These reports tend to concentrate on the identification of gifted students, program options, goals and objectives, budgetary considerations, and special subpopulations within the gifted population. The West Virginia report lists specific skills and knowledge needed by principals to administer gifted programs.

In reviewing the literature regarding skills and knowledge needed by principals to be effective leaders in their building, it became apparent to this researcher that the same skills needed to administer handicapped programs are those needed to successfully administer gifted programs. In fact, these skills and knowledge are needed for all principals in their work experience with regular classroom
teachers as well. Some of the literature indicates that principals have begun to develop skills in handling special education problems. Studies are not commonplace which show that building principals are satisfied with the university preservice preparation they received prior to working with the gifted and talented population.
Summary

It has been the purpose of Chapter II to review the literature in the field that relates to the research for this study. Journals, dissertations, textbooks, and studies describing the skills and knowledge needed by principals to administer programs for exceptional children were of primary interest in this effort. University preservice training programs for school principals were studied in an attempt to determine which content models were currently being utilized. An historical investigation was made of gifted programs, and attitudes toward gifted and talented education. Likewise the evolution of the study of school administration theory and its contributing authors were researched to gain a better understanding of attitudinal development in this field.

Costa (1985) cites John Goodlad's book, *A Place Called School* (1983) wherein concern was expressed for the lack of intellectual stimulation in America's schools. Costa would seek to alleviate this concern by defining the role of the principal as creating a school atmosphere which invites a teacher's highest intellectual functioning" (Costa, p. 6). The principal has a strong influence on the curriculum that is implemented, on the instructional strategies employed, and on the learnings that students achieve (Costa).

The concern of this researcher is that unless school principals graduate from the university training programs equipped with the necessary skills to work with the gifted population, comprehensive programs for the gifted and talented child will continue to be
piece-meal at best. Van Tassell-Baska (1986) voices this concern for gifted programs within the Richardson study, completed in April, 1986:

The need for a comprehensive program development implies a need to change educators behaviors and philosophy toward able learners. Fragmented programs have resulted from a lack of clear affirmation and commitment to special programs on the part of many school administrators who see broadened opportunities as placing undue emphasis on a perceived controversial issue. (p. 37)

That issue, though implied, is resolved with a free and appropriate education for every child.
CHAPTER III

METHODOLOGY

Nature and Design of the Study

The primary nature and design of research for this study was descriptive-correlational. The purpose of the study was to describe the attitudes of heads of programs in educational administration toward gifted and talented education. Population, instrument construction, data collection, validity and reliability of the instrument and data analysis procedures are described in Chapter III.

Population

The population selected for this study was the 49 heads of programs in Educational Administration at those colleges and universities which train school principals and which also offer the doctoral-level program in gifted education. This population was described by Karnes and Parker (1984) and updated in 1986. Actual names of the target respondents were derived from various national publications; the 1986 Edition of The Yearbook of Higher Education, the 1985-86 catalog of the University Council for Educational Administration, and college catalogues located at Main Library, The Ohio State University. The geographic distribution of the survey population nationally was of interest to the researcher.

Instrumentation

The survey instrument (Appendix D) used in the study was constructed by this researcher following an extensive review of the
literature. The survey instrument was a revision of an earlier instrument. That instrument, also constructed by the researcher had been field tested on a nationwide population of 50 State Directors of Teacher Certification, yielding Section I and Section II of the final survey questionnaire, titled "Training Programs for Principals Questionnaire."

Section I was designed to collect personal and demographic information about the respondents. This section gathered data regarding respondents' academic position, gender, years of experience as program head, and years of experience in administration. Respondents were further requested to answer positively or negatively regarding any special education coursework requirement for the certification of school principals in their state. A final question in Section I was related to the respondent's familiarity with current federal legislation for gifted and talented education, the Biaggi Bill (H.R. 3263). Those who responded positively as having familiarity with the Biaggi Bill were further asked to express their opinion on its becoming law.

Section II consisted of ten questions and was designed to measure overall attitudes of the respondents toward gifted and talented programs. A five point Likert-type scale was used and incorporated a range of responses: 'strongly agree', 'agree', 'undecided', 'disagree', and 'strongly disagree'. The question content in Section II included the need for gifted and talented education coursework during a principal's preservice training, state certification requirements,
program service options for gifted and talented children, and federal incentives for states to provide local program services.

Section III was designed to measure: (1) the perceived importance of skills and knowledge needed by principals to administer gifted and talented programs, and (2) the perceived level of acquisition of skills and knowledge reached by principals in the preservice training programs. Ten basic areas of preparation were selected. These areas were: philosophy, leadership, curriculum, supervision, evaluation, personnel selection, planning and organization, school law, school finance, and multi-cultural issues. The areas were selected following a review of the training programs at nine major universities. Each of these universities also grants the doctoral degree in gifted education. Also contributing to the review of literature in the field were dissertations, journal articles, textbooks, and state-wide studies. In addition, an address by Passow (1985) was of assistance in the final selection of those skills and knowledge needed by principals to be included in Section III of the survey instrument.

Section III was constructed in such a manner that perceived levels of importance and perceived levels of acquisition of skills and knowledge needed by principals to administer gifted and talented programs could be statistically compared.

The purpose of Section IV of the survey instrument was to investigate five of the most common university preservice models for training school principals, as described in the literature. The models selected for study were:
A. Administration in terms of Instructional Leadership
B. Administration in terms of Human Resource Development
C. Administration in terms of Staff Development
D. Administration-qua-Administration
E. Administration in terms of the Effective Schools Model.

A brief description of each model was included in the questionnaire. Respondents were asked to rank the five models on a five-point scale from 'Best' to 'Least' in relation to how each model was perceived as lending itself to preparing school principals to administer gifted and talented programs. Scores were tabulated, ranked, and then totaled. Model preference was thereby determined.

On the final page of the questionnaire space was provided for comments regarding perceptions of the merits of the study. In addition, respondents were asked to address the question of incorporating gifted and talented training into preservice training programs. Participant appreciation was the final statement on the survey questionnaire. A complete copy of the survey instrument is presented in Appendix D.

Validity

Content validity was achieved through a panel of experts consisting of State Department of Education consultants, university professors, and school principals (Appendix C). The principals represented schools which had a current gifted and talented program, and represented elementary, middle, and high school levels. The panel
members determined that the various sections of the questionnaire had been adequately sampled to represent skill and knowledge areas, examples of current preservice models, and relative concerns in the field of preservice training for school administrators.

External validity concerns included: frame error, or leaving a potential respondent out of the sample; non-response error, wherein a potential respondent fails to complete the survey instrument; and non-representative sample which suggests that the sample distribution is biased.

Frame error was controlled by using the current publication lists of heads of programs for educational administration at those universities which offer the doctoral program in gifted education, of which there are 49.

Non-response error was controlled in a manner described by Miller and Smith (1983). Statistical analysis comparing the means of responses from respondents and nonrespondents indicated no significant differences. Therefore all the data were combined for subsequent analysis.

Geographic representation, nationally, was determined through population pre-existence, and therefore no selection error was evidenced.

**Data Collection**

The survey questionnaire was mailed to the 49 member population of heads of programs in educational administration in October, 1986. An
addressed, stamped envelope was included to encourage each respondent's return of the survey. A letter describing the purpose of the study, and guaranteeing anonymity was enclosed. As survey returns were received they were tabulated and marked with date of receipt.

At the end of four weeks a second mailing was sent to non-respondents, with a second letter urging their participation in the study. A total of 43 surveys were returned, of which 39 were completed in full. No data were collected from the four surveys which were returned with only Section I completed. The response rate of 88% was considered acceptable. Babbie (1973) states that response rate on a survey questionnaire can be considered adequate at a 50% return rate, good at 60% return, and very good at 70% return.

Reliability Measures

A preliminary survey instrument constructed by the researcher, and comprised of 25 questions was pilot tested in July, 1986 on a national population of 50 State Directors of Certification. The return of 38 surveys (76%) was judged to be an adequate sample of the population. This survey yielded the ten questions in Section II of the final instrument along with the demographic questions in Section I.

Cronbach's alpha reliability coefficients were calculated on Section II of the questionnaire. A reliability coefficient of .70 was determined for this section following a process of eliminating those items not consistently contributing towards the overall measurement of the domain. This value was considered as acceptable by Nunnally (1967,
Questions four, seven and ten were those items not reliably contributing.

Cronbach's alpha reliability coefficients were established for the Importance and Acquisition subscales to determine the extent to which subscale items consistently contributed toward the measurement of the respective domains. The results presented in Table 1 indicted acceptable reliability coefficients.

Table 1

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Importance</th>
<th>Acquisition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philosophy</td>
<td>.85</td>
<td>.88</td>
</tr>
<tr>
<td>Leadership</td>
<td>.40</td>
<td>.76</td>
</tr>
<tr>
<td>Curriculum</td>
<td>.81</td>
<td>.81</td>
</tr>
<tr>
<td>Supervision</td>
<td>.71</td>
<td>.83</td>
</tr>
<tr>
<td>Evaluation</td>
<td>.83</td>
<td>.93</td>
</tr>
<tr>
<td>Personnel</td>
<td>.81</td>
<td>.87</td>
</tr>
<tr>
<td>Planning and Organization</td>
<td>.80</td>
<td>.85</td>
</tr>
<tr>
<td>School Law</td>
<td>.84</td>
<td>.83</td>
</tr>
<tr>
<td>School Finance</td>
<td>.85</td>
<td>.89</td>
</tr>
<tr>
<td>Multi-Cultural Issues</td>
<td>.96</td>
<td>.96</td>
</tr>
</tbody>
</table>

N = 39

Data Analysis

This section describes how data from the study were analyzed to meet the objectives of the study. The statistical package SPSSX 21
available at the Instruction and Research Computer Center (IRCC), The Ohio State University was utilized for managing, analyzing, and displaying the data in this study.

Descriptive statistics involving measures of central tendency, percentages, and frequency distributions were computed to describe the respondents on the variables of the study. Paired t-tests were computed to determine if significant differences existed between the respondents' perceptions of level of importance and acquisition subscales. The strength and nature of relationships between variables in the study were determined using correlational techniques. Thus, Pearson, point biserial, and phi correlation coefficients were computed to describe the relationships between variables.

Davis (1971) lists the following association levels for correlation coefficients when comparing variables:

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>.70 or Higher</td>
<td>Very Strong Association</td>
</tr>
<tr>
<td>.50 to .69</td>
<td>Substantial Association</td>
</tr>
<tr>
<td>.30 to .49</td>
<td>Moderate Association</td>
</tr>
<tr>
<td>.10 to .29</td>
<td>Low Association</td>
</tr>
<tr>
<td>.01 to .09</td>
<td>Negligible Association</td>
</tr>
</tbody>
</table>

These limits were used for statements of relationship in this study. Thus, the variance factors, variables, and processes in Chapter III contributed to the establishment of a methodology for completing this study. Well-defined methodology was mandatory for the description and analysis of the data presented in Chapter IV.
Chapter IV

FINDINGS

This study was descriptive-correlational in nature and had as its primary purpose the investigation of attitudes toward gifted and talented education by heads of preservice training programs for school principals at selected universities and colleges. In addition this study sought to assess the perceived level of importance of certain skills and knowledge needed by principals to administer gifted and talented programs. Also measured were the perceived levels of acquisition of those skills and knowledge within current preservice training programs. These were built into the study. A third purpose of the study was to research existing preservice models which, if employed, would best incorporate gifted and talented program concepts into the training of school principals. A final purpose was to investigate the implications of this study for federal intervention into gifted and talented education.

VARIABLES

While this study is descriptive-correlational in nature, the initial phase of the investigation was of a descriptive nature. Thus, variables in this phase are not identified as independent or dependent. Objective 10 sought to investigate the relationship between the respondents' perceptions of the importance of the skills and knowledge versus the level of acquisition of those skills and knowledge identified in the study. To provide answers to this
The following variables were designated as independent variables:

1. Number of years of experience in the respondent's present position.
2. Number of years of experience in the field of educational administration.
3. A state requirement of special education coursework for the certification of school principals.
4. Respondent's familiarity with the proposed Education for Gifted and Talented Youth legislation (H.R. 3263, 1985).
5. Respondent's membership in the University Council for Educational Administration, as determined from the national UCEA published roster, 1985-1986.

The dependent variable in this study was the overall attitude toward gifted and talented education by university program-head respondents as evidenced by their answers on the survey instrument.

Other Factors

Gender (Sex) was not researched as a variable in this study due to the low number of female participants, four (10%). However, gender data was maintained for further research.

All respondents were deemed to be serving as head of programs.

Geographic representation was also noted from the original list of potential respondents.

OBJECTIVES

Objectives

The objectives of this study were:

Objective 1. To describe the heads of programs for the training of school administrators on the following variables:
A. Position
B. Sex
C. Years of experience in the present position
D. Years of experience in administration
E. Membership in UCEA
F. State requirement for special education coursework
G. Familiarity with the Education for Gifted and Talented Youth legislation (H.R. 3263, 1985)
H. Geographic location of universities
I. Overall perception of gifted and talented programs

Objective 2. To investigate the attitudes of the Educational Administration Department Heads with relation to:

a. Levels of skills acquired by principals in their university training program to:
   i. administer gifted and talented programs housed in their building
   ii. supervise teachers working in gifted and talented programs in their buildings
   iii. provide leadership in IEP team conferences for gifted and talented children
   iv. work with parents on problems which relate to the gifted and talented program

b. Perceived importance of knowledge obtained by principals in their university training programs to:
i. work within current State Department of Education Gifted and Talented Program Guidelines

ii. provide for the range of academic needs of the gifted and talented children

iii. provide leadership for program development and implementation in gifted and talented programs located in their buildings

Objective 3. To investigate the extent to which the survey respondents support a need for change in state certification standards for school principals to include university coursework in gifted and talented education.

Objective 4. To investigate the extent to which survey respondents support the concept that school principals already working in the field should acquire the described skills and knowledge by means of inservice workshop attendance.

Objective 5. To investigate the extent to which survey respondents agree that the skills and knowledge listed in the survey instrument should be included in preservice preparation programs for training school principals.

Objective 6. To investigate the extent to which the survey respondents agree that the skills and knowledge listed in the survey
instrument will normally be acquired by school principals in their preservice training programs.

**Objective 7.** To investigate the extent to which the survey respondents agree that coursework currently exists at their university which addresses the skills and knowledge needed to administer gifted and talented programs.

**Objective 8.** To investigate the extent to which the survey respondents agree that the training models listed in the survey instrument are appropriate for providing principals with the skills and knowledge necessary for administering gifted and talented programs.

**Objective 9.** To investigate the extent to which this study may have implications for federal intervention in gifted and talented education.

**Objective 10.** To investigate the relationship between the respondents' perceptions of the importance of the skills and knowledge and the level of acquisition of those skills and knowledge identified in the study.

**Objective 11.** To investigate the relationships between the independent and the dependent variables.

It was determined by this researcher that each of the objectives was an important concept and would contribute to the description of the attitudes of the population toward gifted and talented education.
Objective 1

Personal and Demographic Variables

A. Position as Head of Program

All respondents were considered as qualifying for Head of Program status for the purpose of this study. Of the seven (18%) who responded as 'other,' all served as either dean of the college, former head of programs, or major professor in the Department of Educational Administration. Current heads of programs numbered 32 (82%).

<table>
<thead>
<tr>
<th>Position</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head of Program</td>
<td>32</td>
<td>82.1</td>
<td>82.1</td>
</tr>
<tr>
<td>Other - Dean, Professor</td>
<td>7</td>
<td>17.9</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

B. Gender

Since the ratio of male to female respondents was 35 to 4 (90% to 10%), sex was not maintained as a variable in this study. Nevertheless, gender statistics were retained for possible future investigation.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>35</td>
<td>89.7</td>
<td>89.7</td>
</tr>
<tr>
<td>Female</td>
<td>4</td>
<td>10.3</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
C. Years of Experience in Present Position as Head of Program

A high number of respondents had served in their present position for five or fewer years (22 or 56%). This represented over half of the population. Ten persons represented the mode of 3.0 years of experience. Only two (5%) had served more than twenty years. Relative newness in this position was evident. A mean of 7.8 years in the position was found for this population. The results pertaining to years of experience in the present position are presented in Table 4.

<table>
<thead>
<tr>
<th>Years in Present Position</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>22</td>
<td>56.4</td>
<td>56.4</td>
</tr>
<tr>
<td>6-10</td>
<td>7</td>
<td>18.0</td>
<td>74.4</td>
</tr>
<tr>
<td>11-20</td>
<td>8</td>
<td>20.6</td>
<td>94.9</td>
</tr>
<tr>
<td>20+</td>
<td>2</td>
<td>5.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Mean 7.8  
Standard Deviation 7.4
Median 4.0  
Range 33.0
Mode 3.0

D. Years of Experience in Administration

Responding professors tended to have substantial experience in the field of educational administration, including university and public school work. The calculated mean for experience was 18.5 years. Fifteen (38%) persons had completed more than 20 years in administration, and 32 (82%) had more than 10 years experience. The
highest number of years of experience was 34. Very few respondents, 3 (8%) had completed less than five years in administration. The results are summarized in Table 5.

Table 5
Years of Experience in Administration

<table>
<thead>
<tr>
<th>Years in Administration</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>3</td>
<td>7.7</td>
<td>7.7</td>
</tr>
<tr>
<td>6-10</td>
<td>4</td>
<td>10.2</td>
<td>17.9</td>
</tr>
<tr>
<td>11-20</td>
<td>17</td>
<td>43.6</td>
<td>61.5</td>
</tr>
<tr>
<td>20+</td>
<td>15</td>
<td>38.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Mean 18.5  
Median 18.0  
Mode 17.0  
Standard Deviation 8.2  
Range 32.0

E. UCEA Membership

A national professional organization has existed since 1956 for the purpose of furthering research, interest, and knowledge in the field of educational administration. This organization, The University Council for Educational Administration (UCEA), listed 29 member universities in its 1985-86 membership directory, of which 18 are represented in this study. The frequency distribution for membership versus non-membership is presented in Table 6.
Table 6
UCEA Membership

<table>
<thead>
<tr>
<th>UCEA Membership</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>18</td>
<td>46.2</td>
<td>46.2</td>
</tr>
<tr>
<td>No</td>
<td>21</td>
<td>53.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

UCEA Membership Experience

Of the 18 UCEA respondents, eleven had completed five or fewer years experience as head of programs, and 14 had fewer than ten years in that position. In overall administrative experience, however, 13 had more than ten years experience, and seven had completed at least 20 years. These results are summarized in Table 7 and Table 8.

Table 7
UCEA Experience in Present Position

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>11</td>
<td>9</td>
<td>20</td>
</tr>
<tr>
<td>5-10</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>11-15</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>16-20</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>20+</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>21</td>
<td>39</td>
</tr>
</tbody>
</table>
Table 8
UCEA Experience in Administration

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>5-10</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>11-15</td>
<td>4</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>16-20</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>20+</td>
<td>7</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>18</td>
<td>21</td>
<td>39</td>
</tr>
</tbody>
</table>

F. Special Education Coursework Requirement

In response to the question of whether coursework in special education was currently required for certification of school principals in their state, the highest proportion of respondents, 25 (64%), indicated no special requirements existed for principals' certification. Fourteen (36%) professors indicated there were requirements in special education skills for principals' certification in their states. Three of those fourteen reported that demonstrated proficiency in special education was required for certification. Analysis of the data showed that only twelve states were represented in this number due to several respondent universities being located in the same states. Stile and Pettibone (1980) reported a similar incidence of states (12) requiring special education preparation for school principals. Now, some years later, this proportion does not appear to be changing. For the most part principals acquire whatever skills they have to administer special programs while on the job. Table 9 is a summary of the frequency wherein special education coursework was required for certification of school principals.
Familiarity With the Biaggi Bill (HR3263)

Interest on the part of the researcher caused this item to be included in the study. The Biaggi Bill was a 1986 piece of federal legislation which, if made law, could have reopened the Office of Gifted and Talented Education in Washington, D.C. This office was closed by the Reagan administration in 1981 and since such time, no national focus on such programs has been forthcoming. A review of the status of federal gifted and talented legislation was presented in Chapter II. Conclusions are presented in Chapter V.

Of the surveyed population of program heads for training school principals, seven (18%) indicated familiarity with the Biaggi Bill. Of those seven, four showed support for the Bill to become law. Therefore, 82% of the professors did not know of this particular piece of federal legislation. No attempt was made in this study to ascertain causal reasons for this phenomena. Pearson correlation coefficient computations showed respondents from states where coursework was required tended to be more familiar with the Biaggi Bill ($r_0 = .35, p < .05$), Table 70, p. 161.

Table 9
Special Education Coursework Requirement

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>14</td>
<td>35.9</td>
<td>35.9</td>
</tr>
<tr>
<td>No</td>
<td>25</td>
<td>64.1</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Response</td>
<td>Frequency</td>
<td>Percent</td>
<td>Cumulative Percent</td>
</tr>
<tr>
<td>----------</td>
<td>-----------</td>
<td>---------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Yes</td>
<td>7</td>
<td>17.9</td>
<td>17.9</td>
</tr>
<tr>
<td>No</td>
<td>32</td>
<td>82.1</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Total 39 100.0

H. Geographic Distribution

Geographic location of the respondents was noted. It was determined that adequate representation, nationally, was achieved. Six respondents represented the West Coast region. Ten professors were from the Southwest region. Seven respondents represented Southern universities. Six Eastern universities were represented. The balance of the survey respondents (10) were from the Midwest area, from Ohio to Nebraska.

The geographic distribution was comprised by chance since the population pre-existed. All universities known to offer doctoral programs in gifted education (49) were included in the survey. Forty-three (43) surveys were returned of which 39 were acceptable. Geographic representation was not used as a variable in this study and anonymity was guaranteed to the respondents.
Table 11
Geographic Distribution of Universities

<table>
<thead>
<tr>
<th>Location</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>West</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Southwest</td>
<td>10</td>
<td>26</td>
</tr>
<tr>
<td>South</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>East</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Midwest</td>
<td>10</td>
<td>26</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

I. Overall Perceptions of Gifted and Talented Programs

Respondents' overall perceptions of gifted and talented programs were measured on a five-point Likert-type scale ranging from "Strongly Agree" to "Strongly Disagree." Perceptions tended to support statements in Section II. For the 39 respondents on those ten questions, there were 33 responses of strong agreement and 241 responses of agreement, representing sixty-nine percent of the total responses made by professors in this section. Fifteen percent (15%) of the responses were marked in disagreement and the balance (16%) undecided. Overall perceptions were represented in Table 12 (p. 102).
Table 12
Overall Perceptions of Gifted and Talented Programs

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>33</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Agree</td>
<td>241</td>
<td>61</td>
<td>69</td>
</tr>
<tr>
<td>Undecided</td>
<td>63</td>
<td>16</td>
<td>85</td>
</tr>
<tr>
<td>Disagree</td>
<td>54</td>
<td>14</td>
<td>99</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>5</td>
<td>1</td>
<td>100</td>
</tr>
</tbody>
</table>

Total 396 100

Mean 2.40  S  0.54
Median 2.43  R  2.57
Mode 2.00

It should be noted that written comments made by respondent professors on the final page of the survey instrument centered around the concern that the principal should be trained to administer all programs housed in their buildings. Gifted and talented programs were seen as currently being slighted. Several professors stated that no one program should be emphasized at the expense of others.

Objective 2

Objective 2 consisted of two parts, each relating to the attitudes of heads of programs for educational administration toward gifted and talented education. Part a addressed the perceived level of skills normally acquired by principals in their university preservice training programs to:

1. administer gifted and talented programs housed in their building
ii. supervise gifted and talented education teachers working in their building

iii. provide leadership in gifted and talented child IEP team conferences

iv. work with parent and community problems relating to gifted and talented programs.

Part b addressed the perceived importance of the knowledge obtained by principals in their university training programs to:

i. work within state guidelines for gifted and talented programs

ii. provide for the range of academic needs of gifted and talented students

iii. provide leadership for gifted and talented program development and program implementation.

Objective 2, Part a

In response to Section II of the survey instrument, program heads indicated that principals could acquire the level of skills needed to administer gifted and talented programs. First, there was agreement that principals needed additional university training in gifted and talented programs. Twenty-two (56%) respondents agreed, nine (23%) were undecided, while eight (21%) disagreed (Table 13, p. 105).

Second, it was agreed that university training programs should provide principals with the knowledge base needed to understand and implement gifted and talented programs. Twenty-nine (74%) agreed, five (13%) were undecided, and five (13%) disagreed (Table 14, p. 106). Respondents indicated that if actual coursework was not completed, then principals could help prepare themselves to administer gifted and talented programs through planned inservice workshop
attendance. Thirty (77%) were in agreement, four (10%) were undecided, and five (13%) did not support this method (Table 15, p. 106).

Less agreement was found among the respondents regarding inclusion of gifted and talented education coursework leading to state certification of school principals. Thirty-six percent were undecided, 35% agreed the training was needed, while 28% were not in support of additional, separate coursework. (Table 16, p. 107).

The level of skills acquired by principals in the university preservice training programs to administer gifted and talented programs was perceived by the survey respondents more than fifty percent of the time to be minimal. This was especially true in the domains of philosophy, leadership, curriculum, and personnel, with curriculum being perceived as the weakest area.

A balanced distribution of responses between adequate and minimal levels of preparation was perceived for the domains of supervision, evaluation, planning and organization, and multi-cultural issues. The highest perceived levels of preparation or skills acquired were reported in the domains of school law and school finance (see Tables 43 to 62).

Supervision of teachers working with gifted and talented programs was reported in the literature as being difficult for principals who had no training in this area (Castle, 1979; Webb, 1981). The responses reported in this research support those earlier studies, in that 28 (72%) of the respondents agreed that principals were either minimally trained, or not at all skilled in prescribing remedial
measures for teachers in the gifted and talented program. (Table 17, p. 107). A substantial number, 19 (49%), also reported a weakness in the principal's ability to set job targets or assess performance of teachers working in gifted and talented programs (Table 18, p. 108).

<table>
<thead>
<tr>
<th>Table 13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need for Additional Training</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Strongly Agree</td>
<td>1</td>
<td>2.6</td>
<td>2.6</td>
</tr>
<tr>
<td>2 Agree</td>
<td>21</td>
<td>53.8</td>
<td>56.4</td>
</tr>
<tr>
<td>3 Undecided</td>
<td>9</td>
<td>23.1</td>
<td>79.5</td>
</tr>
<tr>
<td>4 Disagree</td>
<td>7</td>
<td>17.9</td>
<td>97.4</td>
</tr>
<tr>
<td>5 Strongly Disagree</td>
<td>1</td>
<td>2.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Total 39 100.0

Mean 2.64 SD 0.90
Median 2.00 Range 4.00
Mode 2.00
### Table 14
Need for A Knowledge Base

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Strongly Agree</td>
<td>2</td>
<td>5.1</td>
<td>5.1</td>
</tr>
<tr>
<td>2 Agree</td>
<td>27</td>
<td>69.2</td>
<td>74.4</td>
</tr>
<tr>
<td>3 Undecided</td>
<td>5</td>
<td>12.8</td>
<td>87.2</td>
</tr>
<tr>
<td>4 Disagree</td>
<td>5</td>
<td>12.8</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Strongly Disagree</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Mean 2.33  
SD 0.77  
Median 2.00  
Range 3.00  
Mode 2.00

### Table 15
Need for Inservice Workshop Attendance

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Strongly Agree</td>
<td>1</td>
<td>2.6</td>
<td>2.6</td>
</tr>
<tr>
<td>2 Agree</td>
<td>29</td>
<td>74.4</td>
<td>76.9</td>
</tr>
<tr>
<td>3 Undecided</td>
<td>4</td>
<td>10.3</td>
<td>87.2</td>
</tr>
<tr>
<td>4 Disagree</td>
<td>5</td>
<td>12.8</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Strongly Disagree</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Mean 2.33  
SD 0.74  
Median 2.00  
Range 3.00  
Mode 2.00
### Table 16
Need of Coursework for State Certification

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Strongly Agree</td>
<td>3</td>
<td>7.7</td>
<td>7.7</td>
</tr>
<tr>
<td>2 Agree</td>
<td>11</td>
<td>28.2</td>
<td>35.9</td>
</tr>
<tr>
<td>3 Undecided</td>
<td>14</td>
<td>35.9</td>
<td>71.8</td>
</tr>
<tr>
<td>4 Disagree</td>
<td>9</td>
<td>23.1</td>
<td>94.9</td>
</tr>
<tr>
<td>5 Strongly Disagree</td>
<td>2</td>
<td>5.1</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>39</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Mean 2.90  SD 1.02  Median 3.00  Range 4.00  Mode 3.00

### Table 17
Skill Level Acquired to Prescribe Remedial Measures for Teachers

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Very Adequate</td>
<td>5</td>
<td>12.8</td>
<td>12.8</td>
</tr>
<tr>
<td>2 Adequate</td>
<td>6</td>
<td>15.4</td>
<td>28.2</td>
</tr>
<tr>
<td>3 Minimal</td>
<td>20</td>
<td>51.3</td>
<td>79.5</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>8</td>
<td>20.5</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>39</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Mean 2.80  SD 0.92  Median 3.00  Range 3.00  Mode 3.00
Table 18
Skill Level Acquired to Assess Teacher Performance

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Very Adequate</td>
<td>5</td>
<td>12.8</td>
<td>12.8</td>
</tr>
<tr>
<td>2 Adequate</td>
<td>15</td>
<td>38.5</td>
<td>51.3</td>
</tr>
<tr>
<td>3 Minimal</td>
<td>17</td>
<td>43.6</td>
<td>94.9</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>2</td>
<td>5.1</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Mean 2.41 SD 0.79
Median 2.00 Range 3.00
Mode 3.00

The ability to provide leadership in IEP team conferences was addressed in Section III. A total of 23 (59%) respondents reported this skill as being important while a similar number, 26 (67%), indicated that principals acquired minimal or no skills in this area (Tables 19 and 20, p. 109).

The belief that principals need to be knowledgeable in the construction of IEP's for gifted children, was thought to be important by 20 (51%) of the respondents, while 31 (79%) respondents indicated that principals had minimal or no skills in this area (Tables 21 and 22, p. 110).

In Section II. respondents strongly supported the statement that IEP's should be written for students enrolled in gifted and talented programs. A total of 26 (67%) professors were in agreement that this
need existed (Table 23, p. 111).

### Table 19
Importance of IEP Team Leadership Skills

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>7</td>
<td>17.9</td>
<td>17.9</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>16</td>
<td>41.0</td>
<td>59.0</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>14</td>
<td>35.9</td>
<td>94.9</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>2</td>
<td>5.1</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Mean 2.28    SD 0.83  
Median 2.00  Range 3.0  
Mode 2.00

### Table 20
Acquisition Level of IEP Team Leadership Skills

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Very Adequate</td>
<td>4</td>
<td>10.3</td>
<td>10.3</td>
</tr>
<tr>
<td>2 Adequate</td>
<td>9</td>
<td>23.1</td>
<td>33.3</td>
</tr>
<tr>
<td>3 Minimal</td>
<td>23</td>
<td>59.0</td>
<td>92.3</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>3</td>
<td>7.7</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Mean 2.64    SD 0.78  
Median 3.00  Range 3.0  
Mode 3.00
### Table 21
Importance of IEP Construction Skills

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>3</td>
<td>7.7</td>
<td>7.7</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>17</td>
<td>43.6</td>
<td>51.3</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>17</td>
<td>43.6</td>
<td>94.9</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>2</td>
<td>5.1</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Total: 39 100.0

Mean: 2.46  SD: 0.72  Median: 2.00  Range: 3.00

### Table 22
Acquisition Level of IEP Construction Skills

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Very Adequate</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2 Adequate</td>
<td>7</td>
<td>17.9</td>
<td>17.9</td>
</tr>
<tr>
<td>3 Minimal</td>
<td>24</td>
<td>61.5</td>
<td>79.5</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>8</td>
<td>20.5</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Total: 39 100.0

Mean: 3.03  SD: 0.63  Median: 3.00  Range: 2.00
Table 23
Need for Gifted and Talented Student IEP's

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Strongly Agree</td>
<td>3</td>
<td>7.7</td>
<td>7.7</td>
</tr>
<tr>
<td>2 Agree</td>
<td>23</td>
<td>59.0</td>
<td>66.7</td>
</tr>
<tr>
<td>3 Undecided</td>
<td>7</td>
<td>17.9</td>
<td>84.6</td>
</tr>
<tr>
<td>4 Disagree</td>
<td>6</td>
<td>15.4</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Strongly Disagree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Mean 2.41 SD 0.85
Median 2.00 Range 3.00
Mode 2.00

The perceived level of skills acquired by principals to work with parents and the community on problems which relate to gifted and talented programs was addressed in both Section II and Section III of the survey. Respondents strongly agreed with the need for identification, placement, and program services for gifted and talented children in each school district. Thirty-seven of 39 professors (95%) supported programs which required community and parent involvement (Table 24, p. 112). Steps leading to gifted and talented program services would normally require: a needs assessment survey, evidence of parent support and community awareness, coupled with strategies, goals, and objectives. A written plan of evaluation would be the culmination of such a process (Swassing, 1985; p. 406).

Section III of the questionnaire dealt with the ability of a principal to communicate the school district's written philosophy to parents and the community regarding the gifted and talented program.
Thirty-seven (75%) respondents indicated this skill was important for principals (Table 25, p. 113). However, 22 (59%) answered that the skill was not adequately acquired by principals within their university preservice training program (Table 26, p. 113).

Table 24
Need for Gifted and Talented Program Services

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>9</td>
<td>23.1</td>
<td>23.1</td>
</tr>
<tr>
<td>Agree</td>
<td>28</td>
<td>71.8</td>
<td>94.9</td>
</tr>
<tr>
<td>Undecided</td>
<td>1</td>
<td>2.6</td>
<td>97.4</td>
</tr>
<tr>
<td>Disagree</td>
<td>1</td>
<td>2.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Mean 1.85
Median 2.00
Mode 2.00
SD 0.59
Range 3.00

The importance of specific training needed by principals to administer special programs, supervise special teachers, provide IEP conference leadership, and work with the general public on problems related to gifted and talented programs was addressed in this objective. There was overall agreement on the importance of this need. Minimal support was given for the adequacy level of skills training to perform these functions.
Table 25
Importance of Communicating School District Philosophy

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>23</td>
<td>59.0</td>
<td>59.0</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>14</td>
<td>35.9</td>
<td>94.9</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>2</td>
<td>5.1</td>
<td>100.0</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Mean 1.46  SD 0.60
Median 1.00  Range 2.00
Mode 1.00

Table 26
Acquisition Level of Communication Skills

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Very Adequate</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2 Adequate</td>
<td>16</td>
<td>41.0</td>
<td>41.0</td>
</tr>
<tr>
<td>3 Minimal</td>
<td>21</td>
<td>56.4</td>
<td>97.4</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>1</td>
<td>2.6</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Mean 2.62  SD 0.54
Median 3.00  Range 2.00
Mode 3.00
Objective 2, Part B also addressed the level of knowledge obtained by principals in their university training programs to:

i. work within state guidelines for gifted and talented programs

ii. provide for the range of academic needs of gifted and talented students

iii. provide leadership for gifted and talented program development and program implementation.

The knowledge needed by principals for working within state guidelines for gifted and talented programs was addressed in Section III. Twenty-one (54%) respondents thought it was extremely important for principals to demonstrate their knowledge of state guidelines and an additional 10 (26%) respondents marked this need as somewhat important (Table 27, p. 115). Twenty-nine (74%) respondents also thought it was important for the principal to assure gifted and talented program compliance for continued state funding (Table 28, p. 115).

Attitudes of survey respondents toward a change in state certification standards regarding coursework in gifted and talented education was addressed in Section II, of the questionnaire. It was found that while 14 (36%) respondents agreed with the inclusion of gifted and talented coursework, 14 (36%) were undecided, and 10 (26%) were in disagreement. Also in Section II respondents were asked to what extent principals should be aware of state requirements for program services, the IEP process, and mainstreaming as related to gifted and talented programs. Support for this knowledge-base need was strongly evidenced in the tabulation of surveys. A high number,
37 (95%) agreed that knowledge of program service requirements was necessary (Table 24, p. 112). Strong support was given for the principal's knowledge in the IEP process, as 26 (67%) agreed on this need (Table 23, p. 111). Support by 20 (51%) of the program heads was also given to the need for principals to understand mainstreaming as it relates to gifted and talented children (Table 29, p. 116).

Table 27
Importance of Working Within State Guidelines

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>21</td>
<td>53.8</td>
<td>53.8</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>10</td>
<td>25.6</td>
<td>79.5</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>7</td>
<td>17.9</td>
<td>97.4</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>1</td>
<td>2.6</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Total 39 100.0

Mean 1.69
Median 1.00 Range 3.00
Mode 1.00

Table 28
Importance of Assuring Program Compliance

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>12</td>
<td>30.8</td>
<td>30.8</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>17</td>
<td>43.6</td>
<td>74.4</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>10</td>
<td>25.6</td>
<td>100.0</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Total 39 100.0

Mean 1.95 SD 0.76
Median 2.00 Range 2.00
Mode 2.00
Table 29
Need for Principal's Support of Mainstreaming

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>1</td>
<td>2.6</td>
<td>2.6</td>
</tr>
<tr>
<td>Agree</td>
<td>19</td>
<td>48.7</td>
<td>51.3</td>
</tr>
<tr>
<td>Undecided</td>
<td>12</td>
<td>30.8</td>
<td>82.1</td>
</tr>
<tr>
<td>Disagree</td>
<td>7</td>
<td>17.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Mean 2.64, SD 0.85, Median 2.00, Range 3.00, Mode 2.00

Table 30
Importance of Curriculum Compacting Knowledge

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>3</td>
<td>7.7</td>
<td>7.7</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>20</td>
<td>51.3</td>
<td>59.0</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>14</td>
<td>35.9</td>
<td>94.9</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>2</td>
<td>5.1</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Mean 2.39, SD 0.71, Median 2.00, Range 3.00, Mode 2.00

Respondents agreed that the principal must provide for: the range of academic needs of gifted and talented students, an understanding of program services, IEP's, and mainstreaming. In addition, it was agreed that the principal needed curriculum and technical skills to
provide the optimal setting for gifted and talented programs. Knowledge in curriculum compacting, by presenting more instruction in a shorter period of time, was seen by program heads as important in 23 (59%) responses. Only two respondents saw this instructional method as not important (5%) (Table 30, p. 116).

An additional curricular format, 'differentiated instruction', provides gifted and talented students with an opportunity to maximize their talents. This method was seen by respondents as important in 80% of the survey returns. Three (8%) program heads indicated this format might not be an important aspect of the training program (Table 31, p. 118).

It was agreed that principals needed to understand the importance of grade acceleration options for gifted and talented students. Sixty-seven percent of the professors supported the need for this knowledge, while only five percent marked this concept as not important (Table 32, p. 118).

Another important aspect of the principal's knowledge base, the need to ensure a correct aptitude-intellect level of instruction, was seen as important by 28 (75%) of the respondents. One person indicated a lack of support for this knowledge need (Table 33, p. 119).

It was extremely important that teachers have access to available gifted curriculum materials in 34 responses (87%). Not one person marked this item as unimportant (Table 34, p. 119). A high proportion, 32 (82%), saw a need for the principal to be able to develop a creative, flexible master schedule; one that would
demonstrate advocacy of the gifted and talented program. Support for this skill was lacking only in two (5%) survey returns (Table 35, p. 121).

Table 31
Importance of Differentiated Instruction Knowledge

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>8</td>
<td>20.5</td>
<td>20.5</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>23</td>
<td>59.0</td>
<td>79.5</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>5</td>
<td>12.8</td>
<td>92.3</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>3</td>
<td>7.7</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Total

Mean 2.08  SD 0.81  Median 2.00  Range 3.00  Mode 2.00

Table 32
Importance of Grade Acceleration Knowledge

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>9</td>
<td>23.1</td>
<td>23.1</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>17</td>
<td>43.6</td>
<td>66.7</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>11</td>
<td>28.2</td>
<td>94.9</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>2</td>
<td>5.1</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Total 39 100.0

Mean 2.15  SD 0.84  Median 2.00  Range 3.00  Mode 2.00
Table 33
Importance of Correct Aptitude-Intellect Instruction

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>12</td>
<td>30.8</td>
<td>30.8</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>16</td>
<td>41.0</td>
<td>71.8</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>10</td>
<td>25.6</td>
<td>97.4</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>1</td>
<td>2.6</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Total 39 100.0

Mean 2.00  SD 0.83
Median 2.00  Range 3.00
Mode 2.00

Table 34
Importance of Teacher Access to Gifted Materials

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>18</td>
<td>46.2</td>
<td>46.2</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>16</td>
<td>41.0</td>
<td>87.2</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>5</td>
<td>12.8</td>
<td>100.0</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Total 39 100.0

Mean 1.67  SD 0.70
Median 2.00  Range 2.00
Mode 1.00

The final concept addressed in Objective 2 was the perceived level of knowledge obtained by principals to help them assume a leadership role in the development and implementation of gifted and talented programs.
Strong agreement was shown by the program heads for the principal to provide this leadership. Demonstrated evidence of the leadership skills would begin with the initiating of a gifted and talented needs assessment. Of the respondents, 30 (77%) thought this was an important skill (Table 36, p. 122), while only three (8%) marked this concept as not important.

Another skill thought to be very important for principals was the ability to provide inservice staff development. Over half (51%) marked this skill as extremely important, and all (100%) gave this skill some level of importance (Table 37, p. 122). Notwithstanding, this high concern for inservice staff development, nearly half of the professors, 19 (49%) indicated this skill was being minimally or not at all acquired (Table 38, p. 123).

A majority of the respondents, 24 (62%) agreed principals should acquire the necessary skills to establish a parent support group for the gifted and talented program. When considering the actual level of acquisition for that skill, however, 29 (74%) of the professors did not show that this skill was in fact being acquired by principals. Twenty-three (59%) marked this skill as not at all acquired, and six (15%) indicated minimal acquisition (Table 39, p. 123). Leadership skills needed by the principal, once a gifted and talented program was established, would be evidenced in the principal's taking of an active role in student placement decisions. Only four (10%) respondents marked this skill as unimportant. The remaining 35 (90%) attached some level of importance to the principal having input into the
identification, team assessment, and ultimate placement of gifted children into an appropriate program (Table 40, p. 124).

In the main, skills presented in this section as being needed by principals received consistent, strong support from the respondent professors. Leadership skills necessary to the administrator were most evidenced in an expressed need for curriculum and program knowledge and understanding. Skill acquisition was perceived as low.

Table 35
Importance of a Creative, Flexible Master Schedule

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>15</td>
<td>38.5</td>
<td>38.5</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>17</td>
<td>43.6</td>
<td>82.1</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>5</td>
<td>12.8</td>
<td>94.9</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>2</td>
<td>5.1</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.00</strong></td>
<td></td>
</tr>
</tbody>
</table>

Mean 1.85  SD 0.84  Median 2.00  Range 3.00  Mode 2.00
### Table 36
Importance of Program Development Skills

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>18</td>
<td>46.2</td>
<td>46.2</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>12</td>
<td>30.8</td>
<td>76.9</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>6</td>
<td>15.4</td>
<td>92.3</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>3</td>
<td>7.7</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Total 39 100.0

Mean 1.85 SD 0.96
Median 2.00 Range 3.00
Mode 1.00

### Table 37
Importance of Providing Inservice Staff Development

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>20</td>
<td>51.3</td>
<td>51.3</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>14</td>
<td>35.9</td>
<td>87.2</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>5</td>
<td>12.8</td>
<td>100.0</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Total 39 100.0

Mean 1.61 SD 0.71
Median 1.00 Range 2.00
Mode 1.00
### Table 38
**Acquisition Level of Inservice Skills**

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Very Adequate</td>
<td>4</td>
<td>10.3</td>
<td>10.3</td>
</tr>
<tr>
<td>2 Adequate</td>
<td>16</td>
<td>41.0</td>
<td>51.3</td>
</tr>
<tr>
<td>3 Minimal</td>
<td>15</td>
<td>38.5</td>
<td>89.7</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>4</td>
<td>10.3</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Total** 39 100.0

Mean 2.49 SD 0.82
Median 2.00 Range 3.00
Mode 2.00

### Table 39
**Acquisition Level of Skills to Establish Parent Support Group**

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Very Adequate</td>
<td>1</td>
<td>2.6</td>
<td>2.6</td>
</tr>
<tr>
<td>2 Adequate</td>
<td>9</td>
<td>23.1</td>
<td>25.6</td>
</tr>
<tr>
<td>3 Minimal</td>
<td>23</td>
<td>59.0</td>
<td>84.6</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>6</td>
<td>15.4</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Total** 39 100.0

Mean 2.87 SD 0.70
Median 3.00 Range 3.00
Mode 3.00
Table 40
Importance of Student Placement Decision-Making Skills

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>8</td>
<td>20.5</td>
<td>20.5</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>20</td>
<td>51.3</td>
<td>71.8</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>7</td>
<td>17.9</td>
<td>89.7</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>4</td>
<td>10.3</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Mean: 2.18  SD: 0.89  Median: 2.00  Range: 3.00

Objective 3. The purpose of Objective 3 was to investigate the extent to which survey respondents supported a need for change in their state certification standards for the purpose of including coursework in gifted and talented education. This objective was addressed in Section II of the survey instrument.

A total of 29 (74%) respondents agreed that State Departments of Education had the responsibility to establish minimum certification requirements for school principals, while nine (23%) program heads marked disagreement on this item (Table 41, p. 126). Strong support was given for the concept of State Departments of Education assisting universities in the development of local options for meeting the minimum requirements for certifying school principals. Professors responded by a margin of 29 (74%) to 7 (18%) in favor of this concept. Only three (8%) were undecided (Table 42, p. 126).
There was overall agreement that principals needed training in the areas of gifted and talented education programs. Respondents agreed 22 (56%) to 8 (20%) that the need was current, with nine (23%) being undecided (see Table 13, p. 105).

A higher proportion of those persons surveyed also agreed by a margin of 29 (74%) to 5 (13%) that university training programs should provide school principals with the knowledge base needed to understand and implement programs in gifted and talented education. Five (13%) were undecided on their perception of this concept (see Table 14, p. 106).

Recommendations for a change in state certification standards appear to be warranted based on findings in this objective. They will be addressed in Chapter V. Justification is also apparent for the inclusion of gifted and talented concepts in the preparation of school principals. Citations throughout Section II, the literature review, support the need for strengthening principal training in this area. In addition, skills described in Section III of the survey instrument were seen as important to principals who administer gifted and talented programs.
Table 41
State Departments' Responsibility for Certification Requirements

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>8</td>
<td>20.5</td>
<td>20.5</td>
</tr>
<tr>
<td>Agree</td>
<td>21</td>
<td>53.8</td>
<td>74.4</td>
</tr>
<tr>
<td>Undecided</td>
<td>1</td>
<td>2.6</td>
<td>76.9</td>
</tr>
<tr>
<td>Disagree</td>
<td>8</td>
<td>20.5</td>
<td>97.4</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>1</td>
<td>2.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Total: 39 (100.0)

Mean: 2.31
SD: 1.10
Median: 2.00
Range: 4.00
Mode: 2.00

Table 42
Need for State Departments Assistance to Universities With Certification Requirements

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>3</td>
<td>7.7</td>
<td>7.7</td>
</tr>
<tr>
<td>Agree</td>
<td>26</td>
<td>66.7</td>
<td>74.4</td>
</tr>
<tr>
<td>Undecided</td>
<td>3</td>
<td>7.7</td>
<td>82.1</td>
</tr>
<tr>
<td>Disagree</td>
<td>6</td>
<td>15.4</td>
<td>97.4</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>1</td>
<td>2.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Total: 39 (100.0)

Mean: 2.39
SD: 0.94
Median: 2.00
Range: 4.00
Mode: 2.00

Objective 4.

The purpose of Objective 4 was to investigate the extent to which survey respondents supported the concept that school principals already working in the field should acquire the described skills and
knowledge by way of inservice workshop attendance.

Attendance by school principals at inservice workshops as a method for acquiring needed skills and knowledge was addressed in Section II. A very high number of respondents, 30 (77%), agreed that this was a possible method. Only four (10%) persons disagreed, and five (13%) were undecided (see Table 15, p. 106).

Several studies in the literature described the benefits of encouraging practicing principals to upgrade their skills by seminar and workshop attendance (Wickstrom, 1978; Castle, 1979; Webb, 1981). This method would suffice for those who chose to attend workshops. However, the inservice method would not reach all principals, unless there were strong state or federal mandates requiring demonstrated skills for principals working with gifted and talented programs.

Objective 5.

Objective 5 addressed the extent to which respondents agreed that the skills and knowledge listed in the survey instrument should be included in preservice training programs for school principals. Section III of the questionnaire was developed to measure the perceived importance of skills and knowledge needed by principals and also to measure how well these skills and knowledge were acquired by principals within their university preservice training program.

In Section II, question 6, it was asked to what extent the survey respondents agreed that principals should acquire the skills and knowledge listed in the questionnaire during their preservice
training. Ten areas of training, selected from existing university programs were used to develop this section. These areas were: philosophy, leadership, curriculum, supervision, evaluation, personnel, planning and organization, school law, school finance, and multi-cultural issues. Respondents' attitudes were reflected by their perceptions of the importance and level of acquisition of these skills and knowledge.

Philosophy

In the area of philosophy, respondents agreed that the principal should effectively interpret and communicate the school district's philosophy and goals for the gifted and talented programs to the teaching staff (37 or 95%); to parent groups (37 or 95%); and to the local news media (33 or 85%).

While 23 (59%) of these same program heads responded that principals were minimally trained in the area of philosophy, four (10%) indicated that principals received no training at all in communicating to the local news media. Yet, 14 (36%) were satisfied with the level of skills acquired in the learning areas of philosophy (Tables 43 and 44, pp. 129-130).

Leadership

Concerning the importance of leadership, program heads agreed the principal should demonstrate leadership skills by:

1. Taking an active role in student placement decisions (28 or 72%).
2. Participating in the multi-disciplinary assessment team process (23 or 59%).

3. Creating gifted and talented program parent groups (24 or 62%).

4. Preparing regular communication releases to the staff, parents, and central office administration concerning gifted and talented programs issues (25 or 64%).

Acquisition of leadership skills was seen as minimally or not at all acquired by an average of 27 (69%) respondents. Adequacy of skill acquisition in the leadership areas was supported by an average of 12 (31%) professors (Tables 45 and 46, pp. 130-131).

**Philosophy Skills and Knowledge**

Table 43
Importance of Philosophy Skills - Average

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>24</td>
<td>61.5</td>
<td>61.5</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>12</td>
<td>30.8</td>
<td>93.2</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>3</td>
<td>7.7</td>
<td>100.0</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Mean 1.56  SD 0.58
Median 1.33  Range 2.00
Mode 1.00
### Table 44
Acquisition Level of Philosophy Skills

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Very Adequate</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2 Adequate</td>
<td>14</td>
<td>35.9</td>
<td>35.9</td>
</tr>
<tr>
<td>3 Minimal</td>
<td>23</td>
<td>59.0</td>
<td>94.9</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>2</td>
<td>5.1</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Mean 2.65  SD 0.52  Median 3.00  Mode 3.00

### Leadership Skills and Knowledge

#### Table 45
Importance of Leadership Skills and Knowledge

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>8</td>
<td>20.5</td>
<td>20.5</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>18</td>
<td>46.2</td>
<td>66.7</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>11</td>
<td>28.2</td>
<td>94.9</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>2</td>
<td>5.1</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Mean 2.22  SD 0.50  Median 2.25  Mode 2.50
Table 46
Acquisition Level of Leadership Skills and Knowledge

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Very Adequate</td>
<td>2</td>
<td>5.1</td>
<td>5.1</td>
</tr>
<tr>
<td>2 Adequate</td>
<td>10</td>
<td>25.6</td>
<td>30.7</td>
</tr>
<tr>
<td>3 Minimal</td>
<td>22</td>
<td>56.5</td>
<td>87.2</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>5</td>
<td>12.8</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Mean 2.74  SD 0.55  Median 3.00  Range 2.75  Mode 3.00

Curriculum

A lack of strength in the training area of curriculum by school principals was of particular concern to the professors of educational administration. A high number of respondents, 37 (95%), agreed that principals should be specifically knowledgeable in:

1. Gifted and talented curriculum design (32 or 82%)
2. Construction of IEP's for gifted and talented children (20 or 51%)
3. Curriculum compacting for gifted and talented children (23 or 59%)
4. Differentiated instructional methods for gifted and talented children (31 or 79%)

An average of 37 professors supported this need. The number of professors who thought this curricular knowledge had been adequately
acquired, however, was quite small. Only four persons (10%) thought that knowledge of curriculum compacting was adequate. Many professors, 25 (65%) marked this area as minimally or not at all acquired (6 or 15%). Curricular design, IEP construction, and differentiated instructional methods were, on the whole, also marked toward inadequacy of acquired knowledge. It was noted, however, that twelve professors (31%) thought that adequacy in the knowledge of differentiated instructional methods for gifted and talented children was attained. This helped to raise the average response in the curriculum domain (Table 47 and 48, p. 133).

Supervision

Concerning the importance of supervision skills, there was agreement by the professors that the principal should provide for:

1. Grade acceleration opportunities (26 or 67%)
2. Non-isolation of gifted and talented children (31 or 79%)
3. Correct aptitude-intellect level of instruction (28 or 72%)
4. Inservice staff development (34 or 87%)

Supervision skills averaged between 'somewhat important' to 'extremely important,' with a more even distribution of responses being received for acquisition of supervision skills. Twenty (51%) of the respondents were satisfied with the level of skill acquisition for inservice staff development, while 19 (49%) indicated minimal or no skills acquired in this domain. Attitudes toward grade acceleration
and non-isolation of gifted and talented children were also evenly balanced. Only in the areas of correct-aptitude level of instruction did the margin decisely favor a 'minimal' or 'not-at-all' acquired response, 26 (67%). On the average, supervision skills were noted as minimally acquired (Tables 49 and 50, p. 134).

Curriculum Skills and Knowledge

Table 47
Importance of Curriculum Skills and Knowledge

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>8</td>
<td>20.5</td>
<td>20.5</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>25</td>
<td>64.1</td>
<td>84.6</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>6</td>
<td>15.4</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Total 39 100.0

Mean 2.96 SD 0.64
Median 2.75 Range 2.75
Mode 3.00

Table 48
Acquisition Level of Curriculum Skills and Knowledge

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Very Adequate</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2 Adequate</td>
<td>8</td>
<td>20.5</td>
<td>20.5</td>
</tr>
<tr>
<td>3 Minimal</td>
<td>25</td>
<td>64.1</td>
<td>84.6</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>6</td>
<td>15.4</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Total 39 100.0

Mean 2.96 SD 0.64
Median 2.75 Range 2.75
Mode 3.00
Supervision Skills and Knowledge

Table 49
Importance of Supervision Skills and Knowledge

<table>
<thead>
<tr>
<th>Response Description</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>13</td>
<td>33.3</td>
<td>33.3</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>16</td>
<td>41.0</td>
<td>74.3</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>9</td>
<td>23.1</td>
<td>97.4</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>1</td>
<td>2.6</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Total: 39 100.0

Mean: 1.93  SD: 0.57
Median: 2.00  Range: 2.00
Mode: 2.00

Table 50
Acquisition Level of Supervision Skills and Knowledge

<table>
<thead>
<tr>
<th>Response Description</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Very Adequate</td>
<td>2</td>
<td>5.1</td>
<td>5.1</td>
</tr>
<tr>
<td>2 Adequate</td>
<td>13</td>
<td>33.3</td>
<td>38.4</td>
</tr>
<tr>
<td>3 Minimal</td>
<td>18</td>
<td>46.2</td>
<td>84.6</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>6</td>
<td>15.4</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Total: 39 100.0

Mean: 2.71  SD: 0.64
Median: 2.75  Range: 2.75
Mode: 3.00

Evaluation

Findings in this study demonstrated that it was important for the principal to be skilled in prescribed areas of evaluation.
Respondents agreed that principals needed skills in:

1. Assessing teacher performance in the gifted and talented programs, (92%)
2. Setting job targets for teachers in the gifted and talented program (85%).
3. Prescribing remedial measures for teachers in the gifted and talented program (69%).
4. Appraising the quality of the gifted and talented program (87%).

"Extremely important" was a common response in this domain for 16 (41%) of the respondents. All (100%) respondents marked evaluation as being an important skill. When assessing the level of skills acquired in the Evaluation domain, respondents were evenly balanced between adequate and inadequate. In assessing teacher performance, 19 (45%) were satisfied, while 20 (51%) were not. For setting job performance standards, 20 (51%) were satisfied, and 19 (45%) were not. The largest difference was in the area of prescribing remedial measures, where 28 (72%) felt the skills were inadequately being acquired and 11 (28%) were satisfied. Even distribution was found in the principal's learned ability to appraise the quality of the gifted and talented program (19 adequate to 20 inadequate). On the whole, however, 22 (56%) of the professors were dissatisfied with the skill level in this domain (Tables 51 and 52, p. 136).
Evaluation Skills and Knowledge

Table 51
Importance of Evaluation Skills and Knowledge

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>16</td>
<td>41.0</td>
<td>41.0</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>17</td>
<td>43.6</td>
<td>84.6</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>6</td>
<td>15.4</td>
<td>100.0</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Mean 1.77  SD 0.58
Median 1.75  Range 1.75
Mode 2.00

Table 52
Acquisition Level of Evaluation Skills and Knowledge

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Very Adequate</td>
<td>5</td>
<td>12.8</td>
<td>12.8</td>
</tr>
<tr>
<td>2 Adequate</td>
<td>12</td>
<td>30.8</td>
<td>43.6</td>
</tr>
<tr>
<td>3 Minimal</td>
<td>18</td>
<td>46.2</td>
<td>89.8</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>4</td>
<td>10.2</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Mean 2.54  SD 0.75
Median 2.75  Range 3.00
Mode 3.00

Personnel

It was viewed as extremely, or somewhat important by heads of
programs that principals exhibit personnel skills in:

1. Interviewing teacher candidates for the gifted and talented program (34 or 87%)

2. Determining the characteristics necessary for teachers of gifted and talented programs (30 or 77%)

3. Determining the level of training necessary for teachers of gifted and talented programs (24 or 62%)

4. Recommending only the most highly qualified persons for employment or promotion into the gifted and talented program (30 or 77%).

The importance of this skill was, on the average, supported by 77% of the professors (Table 53, p. 138).

Perceived adequacy of interviewing skills received positive scores from the heads of programs; 20 (51%) felt the level of skills acquired were adequate. Yet, it was estimated that principals would recommend the best candidates only by 18 (46%) professors. A similar number of respondents (19 or 49%) did not support this level of competence as being adequate in evaluation. Principals were seen as not having acquired strong skills for determining teacher characteristics or qualifications. The difference in this domain was as high as 2 to 1, or 26 to 13, when measuring levels of adequacy. On the average, acquisition levels were seen as 'minimal' or 'not at all' for 23 (59%) of the respondents (Table 54, p. 138).
Personnel Skills and Knowledge

Table 53
Importance of Personnel Skills and Knowledge

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>17</td>
<td>43.6</td>
<td>43.6</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>13</td>
<td>33.3</td>
<td>76.9</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>8</td>
<td>20.5</td>
<td>97.4</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>1</td>
<td>2.6</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td>1.84</td>
<td><strong>SD 0.65</strong></td>
<td><strong>Median 1.75</strong></td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td>1.00</td>
<td><strong>Range 2.25</strong></td>
<td><strong>Range 2.25</strong></td>
</tr>
</tbody>
</table>

Table 54
Acquisition Level of Personnel Skills and Knowledge

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Very Adequate</td>
<td>4</td>
<td>10.3</td>
<td>10.3</td>
</tr>
<tr>
<td>2 Adequate</td>
<td>12</td>
<td>30.7</td>
<td>41.0</td>
</tr>
<tr>
<td>3 Minimal</td>
<td>19</td>
<td>48.7</td>
<td>89.7</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>4</td>
<td>10.3</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>2.58</strong></td>
<td><strong>SD 0.71</strong></td>
<td><strong>Median 2.75</strong></td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td><strong>2.75</strong></td>
<td><strong>Range 2.75</strong></td>
<td><strong>Range 2.75</strong></td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td><strong>3.00</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Planning and Organization

Respondents agreed that the principal must demonstrate planning and organization skills by:

1. Initiating a gifted and talented needs assessment study (30 or 77%)
2. Providing teachers with access to gifted and talented curriculum materials (34 or 87%)
3. Providing for continuous identification of children who would benefit from the gifted and talented program (29 or 74%)
4. Developing a creative, flexible master schedule which demonstrates advocacy of the gifted and talented program (32 or 82%).

The importance of these skills were seen by 82% of the respondents as 'somewhat' or 'extremely important' (Table 55, p. 140).

The acquired ability by principals to demonstrate skills in planning and organization received moderate support from program heads. An average of 17 (44%) respondents indicated that principals received adequate preparation during their preservice training. An average of 22 (56%) responses in this area were marked 'minimal' preparation or 'not at all' prepared (Table 56, p. 140).
Planning and Organization Skills and Knowledge

Table 55
Importance of Planning and Organization Skills and Knowledge

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>17</td>
<td>43.6</td>
<td>43.6</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>15</td>
<td>38.5</td>
<td>82.1</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>6</td>
<td>15.4</td>
<td>97.5</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>1</td>
<td>2.5</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Mean 1.80 SD 0.66
Median 1.75 Range 2.50
Mode 1.00

Table 56
Acquisition Level of Planning and Organization Skills and Knowledge

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Very Adequate</td>
<td>4</td>
<td>10.3</td>
<td>10.3</td>
</tr>
<tr>
<td>2 Adequate</td>
<td>13</td>
<td>33.3</td>
<td>43.6</td>
</tr>
<tr>
<td>3 Minimal</td>
<td>17</td>
<td>43.6</td>
<td>87.2</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>5</td>
<td>12.8</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Mean 2.56 SD 0.70
Median 2.75 Range 3.00
Mode 3.00

School Law

The training area of School Law was seen by professors as extremely important to school principals. All four sub-areas were often marked
as 'extremely' or 'somewhat' important. Respondents agreed that the principal should demonstrate knowledge in school law by:

1. Studying current State standards for gifted and talented programs (31 or 79%)
2. Reviewing recent court decisions which affect gifted and talented programs (30 or 77%)
3. Resolving potential sources of litigation (30 or 77%)
4. Maintaining a complete and accurate student records system (36 or 92%).

All professors marked this area as being an important skill (Table 57, p. 142).

Responding professors also agreed that this area of school law was receiving positive attention in the university preservice training programs. An average of 28 (72%) persons indicated that administrators received either 'very adequate' or 'adequate' preparation in school law. This was the sole instance where heads of programs gave positive scores to both level of importance and level of acquisition (Table 58, p. 142).
School Law Skills and Knowledge

Table 57
Importance of School Law Skills and Knowledge

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>21</td>
<td>53.8</td>
<td>53.8</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>11</td>
<td>28.2</td>
<td>82.0</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>7</td>
<td>18.0</td>
<td>100.0</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Total          | 39        | 100.0   |                      |

Mean           | 1.67      | SD 0.66 |
Median         | 1.50      | Range 2.00 |
Mode           | 1.00      |           |

Table 58
Acquisition Level of School Law Skills and Knowledge

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Very Adequate</td>
<td>12</td>
<td>30.8</td>
<td>30.8</td>
</tr>
<tr>
<td>2 Adequate</td>
<td>16</td>
<td>41.0</td>
<td>71.8</td>
</tr>
<tr>
<td>3 Minimal</td>
<td>9</td>
<td>23.1</td>
<td>94.9</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>2</td>
<td>5.1</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Total          | 39        | 100.0   |                      |

Mean           | 2.03      | SD 0.70 |
Median         | 2.25      | Range 3.00 |
Mode           | 2.00      |           |

School Finance

In the domain of school finance, the university professors agreed this area was very important to school principals. Those marking
either 'extremely' or 'somewhat' important averaged more than 32 (82%) in each category. Agreement among respondents indicated that principals needed skills in the area of school finance to:

1. Assure gifted and talented program compliance for continued state funding (29 or 74%)
2. Utilize allocated resources to achieve building priorities (33 or 85%)
3. Anticipate annual budgetary needs for the gifted and talented program (33 or 85%)
4. Maintain a financial accounting of building equipment and materials used in the gifted and talented program (34 or 87%).

All respondents marked the overall area of school finance as being important for school principals (Table 59, p. 144). The area of school finance was also seen as one wherein principals were receiving a satisfactory degree of preparation; albeit not totally sufficient. An average of 24 (62%) respondents indicated that principals were adequately prepared in school finance. Fourteen (36%) of those surveyed marked this area as offering a minimal level of preparation to principals (Table 60, p. 144).
### Table 59
Importance of School Finance Skills and Knowledge

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>16</td>
<td>41.0</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>16</td>
<td>41.0</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>7</td>
<td>18.0</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

| Cumulative Frequency | 41.0 | 41.0 | 100.0 |

Total 39 100.0

Mean 1.78  SD 0.61  Median 1.75  Range: 2.00

Mode 1.00

### Table 60
Acquisition Level of School Finance Skills and Knowledge

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Very Adequate</td>
<td>7</td>
<td>17.9</td>
<td>17.9</td>
</tr>
<tr>
<td>2 Adequate</td>
<td>17</td>
<td>43.6</td>
<td>61.5</td>
</tr>
<tr>
<td>3 Minimal</td>
<td>14</td>
<td>35.9</td>
<td>97.4</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>1</td>
<td>2.6</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

| Total                   | 39        | 100.0   |

Mean 2.24  SD 0.83  Median 2.25  Range 3.00

Mode 2.00

### Multi Cultural Issues

The importance of school principals having the necessary skills to
work with multi-cultural issues in relation to the gifted and talented
population received very high agreement among the program-head
respondents. This item in the survey instrument addressed a very
important philosophical question: Are principals aware that a child's
giftedness may be masked by such variables as language, racial,
sexual, and handicap differences? Most respondents marked this item
as either 'extremely' or 'somewhat' important, with the average number
of such responses being 34 (87%). Nevertheless, five (13%)
respondents thought the multi-cultural issues of language barriers,
cultural deprivation, sexual bias, minority representation,
handicapping conditions, and underachievement were only slightly
important (Table 61, p. 146).

The perceptions of the level of acquisition of multi-cultural
awareness skills were evenly distributed by the university population
respondents. Over half (20 or 51%) indicated that principals did
acquire the necessary skills and knowledge in this area. An average
of 19 (49%) felt that principals acquired minimal or no skills in the
multi-cultural areas as related to gifted and talented students (Table
62, p. 146).

Findings in objective five and objective six supported the need
for principals to obtain the skills and knowledge listed in the ten
learning areas of the questionnaire. Only the skill areas of school
law and school finances were seen as providing the necessary level of
training.
Multi-Cultural Issue Skills and Knowledge

Table 61
Importance of Multi-Cultural Issue Skills and Knowledge

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Extremely</td>
<td>17</td>
<td>43.6</td>
<td>43.6</td>
</tr>
<tr>
<td>2 Somewhat</td>
<td>17</td>
<td>43.6</td>
<td>87.2</td>
</tr>
<tr>
<td>3 Slightly</td>
<td>5</td>
<td>12.8</td>
<td>100.0</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Mean 1.74  SD 0.65
Median 2.00  Range 2.00
Mode 2.00

Table 62
Acquisition Level of Multi-Cultural Issue Skills and Knowledge

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Very Adequate</td>
<td>5</td>
<td>12.8</td>
<td>12.8</td>
</tr>
<tr>
<td>2 Adequate</td>
<td>15</td>
<td>38.5</td>
<td>51.3</td>
</tr>
<tr>
<td>3 Minimal</td>
<td>14</td>
<td>35.9</td>
<td>87.2</td>
</tr>
<tr>
<td>4 Not At All</td>
<td>5</td>
<td>12.8</td>
<td>100.0</td>
</tr>
<tr>
<td>5 Undecided</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Mean 2.46  SD 0.83
Median 2.33  Range 3.00
Mode 2.00

Objective 7

The extent to which respondents agreed that coursework already existed at their university addressing the skills and knowledge needed
by principals to administer gifted and talented programs was investigated in Section III of the survey instrument. In the areas of school law and school finance, professors indicated that adequate skills were being acquired by principals in their preservice training courses, by 72% and 62% respectively. Less than half of the respondents indicated that skill adequacy was currently being reached in the areas of planning and organization (44%), evaluation (44%), personnel (41%) and supervision (38%). In addition, the learning areas of philosophy (36%), leadership (32%) and curriculum (21%) were seen as minimally providing skills and knowledge needed by principals to administer gifted and talented programs. Nearly half (49%) of the professors viewed skills in multi-cultural issues as not being sufficiently taught.

Attitudes expressed in Section II of the questionnaire supported the need for change in preservice training programs. This was especially evident in Tables 9 to 12. A high percentage of professors (61%) agreed that principals need training in gifted and talented program administration. Also reflected was the need for specific administrative skills in working with gifted and talented IEP's and mainstreaming (see Tables 18 and 19, pp. 108-109). Although a number of program heads (14 or 38%) had marked the need for specific coursework as undecided, the overall perceptions of coursework needs were supported.
Objective 8 asked the survey respondents to indicate which of the training models listed in the survey instrument best prepared school principals for administering gifted and talented programs. An analysis of the responses in this section indicated a clear preference for Model A: Instructional Leadership, and Model B: Human Resource Development. Perceived preferences for the various program models were calculated by a system of weighting the responses. After tabulation of all responses, weighted scores for each model were assigned by multiplying the "highest or best" tabulated total response score by five; the second best by four; the third best by three; the fourth best by two; and the least preferred model total score by one. This process was used for each of the five models.

Stated definitions of the models are represented along with the calculated total scores, indicating respondents' attitudes toward the five models:

Model A - 158 Points - Administration in terms of instructional leadership - a model in which the principal contributes directly to the instructional process and takes an active leadership role.

Model B - 147 Points - Administration in terms of human resource development - a model wherein the principal takes a mentorship role in improving the educational skills of his or her staff.

Model C - 99 Points - Administration in terms of staff
development - a model which encourages the principals to provide inservice leadership, professional growth opportunities, and meaningful faculty meetings to the staff.

Model D - **75 Points** - Administration - qua-administration, a model which uses general theories, concepts and constructs that are translated into behaviors and skills appropriate for various administrative positions.

Model E - **106 Points** - Administration in terms of the effective schools model, which requires specific tasks for the principal in providing building leadership.

This ranking/weighting analysis suggests that Model A, Administration in Terms of Instructional Leadership - is most preferred by the professors for providing the necessary skills and knowledge to principals who would be administering gifted and talented programs, followed closely by Model B, the Human Resource Development Model. **Model D** - Administration-quæ-Administration appears not to lend itself to this process in that 25 (64%) of the program heads rated this model as least likely to provide gifted and talented skills and knowledge to principals. These weighted score totals are shown in Table 63 (p. 150).
Table 63
Section IV - Preservice Training Models - Weighted Scores

<table>
<thead>
<tr>
<th></th>
<th>1st Best f</th>
<th>1st Best V</th>
<th>2nd f</th>
<th>2nd V</th>
<th>3rd f</th>
<th>3rd V</th>
<th>4th f</th>
<th>4th V</th>
<th>5th Least f</th>
<th>5th Least V</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model A</td>
<td>16</td>
<td>80</td>
<td>13</td>
<td>52</td>
<td>7</td>
<td>21</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>158</td>
</tr>
<tr>
<td>Model B</td>
<td>14</td>
<td>70</td>
<td>8</td>
<td>32</td>
<td>12</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>147</td>
</tr>
<tr>
<td>Model C</td>
<td>1</td>
<td>5</td>
<td>7</td>
<td>28</td>
<td>9</td>
<td>17</td>
<td>8</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>99</td>
</tr>
<tr>
<td>Model D</td>
<td>6</td>
<td>30</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>5</td>
<td>10</td>
<td>25</td>
<td>25</td>
<td>75</td>
</tr>
<tr>
<td>Model E</td>
<td>2</td>
<td>10</td>
<td>40</td>
<td>40</td>
<td>9</td>
<td>27</td>
<td>11</td>
<td>22</td>
<td>7</td>
<td>7</td>
<td>106</td>
</tr>
</tbody>
</table>

f = Frequency of Response
V = Weighted Value

N = 39

UCEA members ranked the Effective Schools Model higher than did the non-UCEA respondents. A 't-test' of comparison based on membership in UCEA indicated a significant preference for the Effective Schools Model. This suggested that respondents differed significantly on their ranking of this model depending on whether or not they were members in UCEA (Table 64, p. 151).

A stated purpose of UCEA has been to explore and discuss current educational research. Therefore, a reason for the ranking differences may be attributed to familiarity with the model. A high probability exists that the Effective Schools Model may have received national exposure at UCEA conventions. For several years, author-educator Edmonds (1979) espoused this model as a method for improving academic performance, especially in major metropolitan areas. Non-UCEA members may not have had exposure to this model to the extent of UCEA members.
Table 64

t-test on Comparison of Training Models and Membership In UCEA

<table>
<thead>
<tr>
<th>Model</th>
<th>N</th>
<th>X</th>
<th>t-value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>18</td>
<td>2.17</td>
<td>1.23</td>
<td>0.23</td>
</tr>
<tr>
<td>Group 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group 2</td>
<td>21</td>
<td>1.76</td>
<td>1.23</td>
<td>0.23</td>
</tr>
<tr>
<td>B</td>
<td>18</td>
<td>2.00</td>
<td>-1.19</td>
<td>0.24</td>
</tr>
<tr>
<td>Group 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group 2</td>
<td>21</td>
<td>2.43</td>
<td>-1.19</td>
<td>0.24</td>
</tr>
<tr>
<td>C</td>
<td>18</td>
<td>3.33</td>
<td>-0.83</td>
<td>0.41</td>
</tr>
<tr>
<td>Group 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group 2</td>
<td>21</td>
<td>3.62</td>
<td>-0.83</td>
<td>0.41</td>
</tr>
<tr>
<td>D</td>
<td>18</td>
<td>3.72</td>
<td>-1.26</td>
<td>0.22</td>
</tr>
<tr>
<td>Group 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group 2</td>
<td>21</td>
<td>4.33</td>
<td>-1.26</td>
<td>0.22</td>
</tr>
<tr>
<td>E</td>
<td>18</td>
<td>3.78</td>
<td>2.63</td>
<td>0.01*</td>
</tr>
<tr>
<td>Group 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group 2</td>
<td>21</td>
<td>2.86</td>
<td>2.63</td>
<td>0.01*</td>
</tr>
</tbody>
</table>

*p < .05

Group 1 = Membership in UCEA; Group 2 = Non-Membership in UCEA

The extent to which the various skills and knowledge were seen as appropriate for principals was investigated in Section III. Chi Square tests for independence were calculated between task Importance versus task Acquisition. A total of 25 (61%) of the 41 tasks calculated for subscale items showed significant Chi Squared values, indicating that a majority of the statements were not independent. Thus, an association existed between task Importance and task Acquisition. In the main, these skills though viewed as important, were not being perceived as being adequately acquired. School law and school finance were the exceptions (Table 65, p. 152).
Table 65
Chi Square Test for Independence Between Task Importance and Task Acquisition

<table>
<thead>
<tr>
<th>Domain</th>
<th>Phi</th>
<th>*F</th>
<th>P</th>
<th>Domain</th>
<th>Phi</th>
<th>*F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Philosophy</td>
<td></td>
<td></td>
<td></td>
<td>6. Personnel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question A</td>
<td>.32</td>
<td>4</td>
<td>.39</td>
<td>Question A</td>
<td>.80</td>
<td>9</td>
<td>.00*</td>
</tr>
<tr>
<td>B</td>
<td>.31</td>
<td>4</td>
<td>.45</td>
<td>B</td>
<td>.61</td>
<td>6</td>
<td>.03*</td>
</tr>
<tr>
<td>C</td>
<td>.58</td>
<td>6</td>
<td>.04*</td>
<td>C</td>
<td>.63</td>
<td>9</td>
<td>.08</td>
</tr>
<tr>
<td>2. Leadership</td>
<td></td>
<td></td>
<td></td>
<td>7. Planning &amp; Organization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question A</td>
<td>.78</td>
<td>9</td>
<td>.01*</td>
<td>Question A</td>
<td>.70</td>
<td>9</td>
<td>.02*</td>
</tr>
<tr>
<td>B</td>
<td>.73</td>
<td>9</td>
<td>.01*</td>
<td>B</td>
<td>.44</td>
<td>6</td>
<td>.28</td>
</tr>
<tr>
<td>C</td>
<td>.32</td>
<td>9</td>
<td>.31</td>
<td>C</td>
<td>.57</td>
<td>6</td>
<td>.05*</td>
</tr>
<tr>
<td>D</td>
<td>.51</td>
<td>9</td>
<td>.33</td>
<td>D</td>
<td>.42</td>
<td>9</td>
<td>.65</td>
</tr>
<tr>
<td>3. Curriculum</td>
<td></td>
<td></td>
<td></td>
<td>8. School Law</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question A</td>
<td>.60</td>
<td>6</td>
<td>.03*</td>
<td>Question A</td>
<td>.76</td>
<td>9</td>
<td>.01*</td>
</tr>
<tr>
<td>B</td>
<td>.33</td>
<td>6</td>
<td>.64</td>
<td>B</td>
<td>.97</td>
<td>9</td>
<td>.00*</td>
</tr>
<tr>
<td>C</td>
<td>.80</td>
<td>6</td>
<td>.00*</td>
<td>C</td>
<td>.94</td>
<td>9</td>
<td>.00*</td>
</tr>
<tr>
<td>D</td>
<td>.87</td>
<td>6</td>
<td>.00*</td>
<td>D</td>
<td>.68</td>
<td>6</td>
<td>.01*</td>
</tr>
<tr>
<td>Question A</td>
<td>.61</td>
<td>9</td>
<td>.11</td>
<td>Question A</td>
<td>.88</td>
<td>9</td>
<td>.00*</td>
</tr>
<tr>
<td>B</td>
<td>.37</td>
<td>9</td>
<td>.82</td>
<td>B</td>
<td>.82</td>
<td>4</td>
<td>.00*</td>
</tr>
<tr>
<td>C</td>
<td>.34</td>
<td>6</td>
<td>.60</td>
<td>C</td>
<td>.54</td>
<td>4</td>
<td>.02*</td>
</tr>
<tr>
<td>D</td>
<td>.60</td>
<td>6</td>
<td>.38</td>
<td>D</td>
<td>.66</td>
<td>6</td>
<td>.01*</td>
</tr>
<tr>
<td>5. Evaluation</td>
<td></td>
<td></td>
<td></td>
<td>10. Multi-Cultural Issues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question A</td>
<td>.41</td>
<td>6</td>
<td>.25</td>
<td>Question A</td>
<td>.67</td>
<td>6</td>
<td>.01*</td>
</tr>
<tr>
<td>B</td>
<td>.51</td>
<td>6</td>
<td>.11</td>
<td>B</td>
<td>.47</td>
<td>6</td>
<td>.19</td>
</tr>
<tr>
<td>C</td>
<td>.73</td>
<td>9</td>
<td>.01*</td>
<td>C</td>
<td>.74</td>
<td>6</td>
<td>.00*</td>
</tr>
<tr>
<td>D</td>
<td>.61</td>
<td>6</td>
<td>.02*</td>
<td>D</td>
<td>.50</td>
<td>6</td>
<td>.13</td>
</tr>
</tbody>
</table>

Phi = Phi Coefficient
*F = Degrees of Freedom
P = Probability
*p < .05
Objective 9

The purpose of Objective 9 was to research the extent to which this study may have implications for federal intervention in gifted and talented education.

National support for gifted education was reviewed in Chapter II. It was noted that U.S. Commissioner of Education, Sidney Marland, Jr. expressed very serious concerns for gifted education in his report to Congress (1971). In 1975 federal legislation (PL 93-380) established an Office of Gifted and Talented Education within the U.S. Office of Education. Annual appropriations reached the $6 million level during the Carter administration. The Office of Gifted and Talented Education was closed, however, in 1982 and consolidated under Chapter 2, Block Grants of the Elementary and Secondary Education Act.

Since that time several attempts have been made to pass a new Gifted and Talented Childrens Educational Act, and re-open an office within the Department of Education. During 1985 and again in 1986, Congressman Mario Biaggi (NY) presented gifted and talented legislation (H.R. 3263). It was this continued effort on the part of Mr. Biaggi that prompted this researcher to include federal intervention queries into this study.

Question 5 in Section I of the survey instrument asked if coursework in special education was a state requirement for certification of school principals. Stile and Pettibone (1980) reported that prior to 1975, few states had such a requirement. With
the passage of PL 94-142, The Education for All Handicapped Act of 1975, the number of states rose to 12 having a reported requirement for administrative certification. Of the 39 respondents in this study, 14 reported some type of special education certification requirement in their state. It can be stated, therefore, that the number of states requiring special education coursework has not increased dramatically. The impact of previous federal legislation on state certification can only be estimated to be marginal. Table 9 (p. 99) summarizes the incidence of special education coursework required for certification in various states.

Question 6 was constructed to measure the respondents' familiarity with current federal legislation effecting gifted and talented education. A high number, 32 (82%), of the professors were unfamiliar with the proposed gifted and talented legislation. Of the seven (18%) who were familiar with this legislation, only four expressed support for its becoming a law (Table 10, p. 100). It should be further stated that since the proposed legislation has yet to pass in Congress, it has not achieved the level of national recognition reached by PL 94-142. Testimony on its behalf was given primarily by professional educators (Appendix E). Excerpts from the testimony given for the Biaggi Bill (H.R. 3263) in May, 1986 were discussed in Chapter II.

Respondents' attitudes toward federal involvement in education were researched in Section II, question 10. Whether states would actively promote gifted and talented programs given federal financial
incentives was posited. Respondent support for this concept was very strong. Twenty-seven (69%) program heads agreed with federal support, plus an additional six (15%) strongly agreed. There were five (13%) who were undecided on federal involvement. One person (3%) disagreed with federal financial incentives to the states.

Table 66

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Strongly Agree</td>
<td>6</td>
<td>15.4</td>
<td>15.4</td>
</tr>
<tr>
<td>2 Agree</td>
<td>27</td>
<td>69.2</td>
<td>84.5</td>
</tr>
<tr>
<td>3 Undecided</td>
<td>5</td>
<td>12.8</td>
<td>97.4</td>
</tr>
<tr>
<td>4 Disagree</td>
<td>1</td>
<td>2.6</td>
<td>100</td>
</tr>
<tr>
<td>5 Strongly Disagree</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Total 39 100.0

Mean 2.03 SD 0.628
Median 2.00 Range 3.000
Mode 2.00

A Pearson correlation coefficient was computed between the two concepts of: State Requirement for Special Education Coursework and Familiarity with the Biaggi Bill. This was done to investigate the relationship between these two examples of federal involvement in education wherein: (1) the passage of federal legislation (PL 94-142) brought about a national awareness for the educational needs of one group of exceptional children, the handicapped; and (2) a newly proposed piece of federal legislation (H.R. 3263, the Biaggi Bill)
intended to create a national awareness for a different group of exceptional children, the gifted and talented.

It was found that respondents in states where coursework was required, tended to be significantly more familiar with the Biaggi Bill. A phi correlation coefficient of .03 existed, indicating a moderate positive relationship between the two examples (Table 70, p. 161).

Chi Square tests were calculated to determine if the respondents' perceptions between questions relating to federal involvement in the education of exceptional children were independent. Both 'Special Education Coursework Requirement' and 'Familiarity with the Biaggi Bill' questions from Section I of the questionnaire were compared with the 'Federal Financial Incentives' question in Section II.

A nonsignificant probability value of .13 between the Coursework Requirement and Federal Incentives was obtained from the computation, indicating the two concepts were independent of each other. Thus, respondents were not influenced by the coursework requirement in their state when answering the Federal Incentive question.

There was a relationship between the Familiarity question and Federal Incentives. This indicated that attitudes toward support for federal financial incentives to states were effected by familiarity with proposed federal legislation. These relationships are presented in Table 67 and Table 68.
Table 67
Chi Square Test for Independence: Coursework by Incentives

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>19</td>
<td>5</td>
<td>1</td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>5</td>
<td>1</td>
<td></td>
<td></td>
<td>39</td>
</tr>
</tbody>
</table>

\[ x^2 \ (2, N = 39) = 3.97, \ P < .05 \]

\[ \theta = 0.32 \quad \text{Probability} = .13 \]

Table 68
Chi Square Test for Independence: Familiarity by Incentives

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>6</td>
<td></td>
<td>1</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>27</td>
<td>5</td>
<td></td>
<td></td>
<td>32</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>5</td>
<td>1</td>
<td></td>
<td></td>
<td>39</td>
</tr>
</tbody>
</table>

\[ x^2 \ (2, N = 39) = 5.67, \ P < .05 \]

\[ \theta = 0.38 \quad \text{Probability} = .05 \]

Even as this study is being concluded, renewed efforts have begun for the passage of federal legislation for gifted and talented education. Mr. Biaggi re-named his bill as The Jacob K. Javits Gifted and Talented Children and Youth Education Act of 1987 (H.R. 543). This bill is benefitting from interest by both political parties as evidenced by the more than 70 bipartisan sponsorship signatures in the
The requested level of appropriations has now risen to $25 million in the Javits Bill.

A companion bill (S. 303) was introduced by Senator William Bradley (NJ) also with the title, Jacob K. Javits Gifted and Talented Children and Youth Education Act of 1987. It is currently being considered in the U.S. Senate.

In addition, the legislative agenda of the U.S. Congress Committee on Education and Labor addresses gifted and talented education as one of its initiatives for consideration in 1987 (Appendix F).

Currently there is a national focus on educationally under-served children. A major change from the Biaggi Bill to the Javits Bill is in terminology. Those children who are at most risk of not being identified as gifted or talented must be given high priority. In that vein, multi-cultural issues were addressed in Section III. Respondents were asked if principals had an awareness for children whose giftedness might be masked by: underachievement, language barriers, cultural deprivation, sexual bias, minority racial representation, or handicapping conditions. Respondents answered this question with a high degree of consistency. Most professors (87%) agreed that principals must be trained to work with problems in the multi-cultural areas. Only half (51%) saw these skills as being adequately learned by principals (see Tables 61 and 62, p. 146).

Objective 10

The purpose of Objective 10 was to describe the relationship between the respondents' perceptions of the importance of the skills
and knowledge identified in the study and the perceived level of acquisition.

Paired t-tests were calculated to determine any significant differences between the respondents' perceptions of importance versus their perceptions of the level of acquisition on the ten subscales represented in the importance and acquisition dimensions of the identified skills and knowledge. Table 69 (p. 159) demonstrates the differences in average mean scores for the ten subscales. Significant differences in these perceptions were found in seven of the ten areas. These differences indicated that the respondents generally perceived the listed skills and knowledge as somewhat or very important to principals. At the same time, the professors marked the level of acquisition as minimally or not at all acquired in relation to the skills needed by principals to administer gifted and talented programs.

Table 69
Comparison of Importance and Acquisition of Skills as Perceived by Heads of Preparation Programs

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Importance</th>
<th>Acquisition</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Philosophy</td>
<td>1.56</td>
<td>2.65</td>
<td>9.75</td>
</tr>
<tr>
<td>Leadership</td>
<td>2.22</td>
<td>2.74</td>
<td>4.66</td>
</tr>
<tr>
<td>Curriculum</td>
<td>2.25</td>
<td>3.00</td>
<td>7.92</td>
</tr>
<tr>
<td>Supervision</td>
<td>1.93</td>
<td>2.71</td>
<td>6.18*</td>
</tr>
<tr>
<td>Evaluation</td>
<td>1.77</td>
<td>2.54</td>
<td>6.95*</td>
</tr>
<tr>
<td>Personnel</td>
<td>1.84</td>
<td>2.58</td>
<td>7.09*</td>
</tr>
<tr>
<td>Planning &amp; Organization</td>
<td>1.80</td>
<td>2.56</td>
<td>6.55*</td>
</tr>
<tr>
<td>School Law</td>
<td>1.67</td>
<td>2.03</td>
<td>3.45*</td>
</tr>
<tr>
<td>School Finance</td>
<td>1.78</td>
<td>2.23</td>
<td>4.56*</td>
</tr>
<tr>
<td>Multi-Cultural Issues</td>
<td>1.74</td>
<td>2.46</td>
<td>5.81*</td>
</tr>
</tbody>
</table>

* p < .05

\( \bar{X} = \text{Mean scores} \)
Objective 11

Interrelationships Among Variables of the Study

In order to investigate the interrelationships among the variables of the study, Pearson correlation coefficients were computed to describe the magnitude and direction of relationships between the independent variables of the study and the dependent variable (Table 70, p. 161). The results indicated significant positive relationships between years of experience as head of programs for educational administration and respondents' overall attitude toward gifted and talented programs ($r = .32$, $p < .05$).

Moderate positive associations were also established between years of experience as head of programs for educational administration and both: years of experience in the field of educational administration ($r = .46$, $p < .05$), and coursework requirement in special education for the certification of school principals ($r_{pb} = .33$, $p < .05$). The foregoing observations established that the more experienced the heads of programs were in terms of number of years served as head of program or years of experience in the field of educational administration, the more positive their attitudes toward gifted and talented education programs. In addition, administrator's years in their present position tended to increase with the total number of years they had served as administrators.

Membership in UCEA was not related to experience, knowledge of the Biaggi Bill, state coursework requirement, or the respondents' perceptions of gifted and talented programs. UCEA membership was best
expressed by differences on ranking of the various training models discussed in Objective 8. Respondent professors who were members of UCEA also gave higher rankings to the Effective Schools Model than did non-members (see Table 64, p. 152).

Respondents from states where coursework was required tended to be more familiar with the Biaggi Bill ($r_o = .35$, $p < .05$).

Table 70
Pearson Correlation Coefficients

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>.46*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>.33*</td>
<td>.44*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>-.07</td>
<td>.28</td>
<td>.35*</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>.13</td>
<td>-.07</td>
<td>-.05</td>
<td>-.03</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>.32*</td>
<td>.21</td>
<td>.08</td>
<td>.19</td>
<td>-.21</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*p < .05

1 Years Experience in Present Position
2 Years Experience in Administration
3 State Requirement of Special Education Coursework
4 Familiarity with the Biaggi Bill (H.R. 3263)
5 Membership in UCEA
6 Overall Attitudes Toward Gifted and Talented Programs

In summary it can be stated that the eleven objectives investigated in this chapter provided the researcher with an excellent basis for analyzing the data from the survey instrument. Perceptions of the respondents, relationships between variables, the impact of each of
the variables on the study, measurement of the several purposes of the study, and attitudes of the program-head population toward gifted and talented programs all contributed to the findings of the study. The overall findings specified those skills that were considered important for principals to administer gifted and talented programs and how well those skills were being provided in the preservice training programs. Also shown in this chapter were: the perceptions of the need for a change in certification standards; the ability of existing program models to incorporate suggested skills and knowledge into the present syllabus; and the impact of federal legislation on educational policy. Conclusions and recommendations are intended for Chapter V along with a summary of the findings.
CHAPTER V
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Concerns by this researcher for a void in the training of school principals gave rise to the subject of this study: attitudes toward gifted and talented programs. A review of the literature showed these concerns were shared by other researchers and authors in the field. There was general agreement in the literature that the building principal was the key to the success of programs located in the school (Webb, 1984). The literature also suggested that principals' perceptions of the value of gifted and talented programs were negative (Laaperi, 1984). The lack of ability of principals to adequately supervise and administer gifted and talented programs located in their building was seen as the result of a lack of a knowledge base and any university training in concepts relating to gifted and talented education (Castle, 1979). Principals' attitudes were influenced by the gap in their professional preparation. It was concluded that the shapers of the principals' attitudes were, to a major degree, the professional educators who control the content and syllabi of university training programs.

By researching the syllabi of various training programs for school principals, it was found that indeed, there exists a void in the content of such programs as related to the educational needs of exceptional children. There was occasional mention of coursework requirements for handicapped and bilingual child specialization, but nothing related to gifted and talented programs.
University professors were surveyed to determine if they had particular biases toward gifted and talented education. Overall attitudes toward gifted and talented education were positive.

Professors were also surveyed in relation to their gender, experience, familiarity with federal legislation, and membership in a national organization of professional educators, UCEA. The professors tended to be male, of low experience in the position as head of programs, more highly experienced in educational administration, and not familiar with current federal legislation effecting gifted and talented education. Membership in UCEA was evenly distributed.

Perceptions of the importance of the suggested skills and knowledge were investigated as well as the perceived level of skill acquisition. These skills were seen as being important to school principals. Of the ten areas of learning listed, only school law and school finance were assessed as being adequately presented within the university course content where exceptional child educational concepts were concerned.

The survey also revealed that a decided preference existed among university program heads for training models centering around the concepts of instructional leadership and human resource development. Other models researched were the process model administration-qua-administration, a staff development model, and the effective schools model. The effective schools model was preferred by professors whose universities were located in states where a certification coursework requirement in special education existed.
There was a special attempt to investigate the attitudes of the respondent population toward federal involvement in gifted and talented education. The professors were, in the main, unfamiliar with current federal legislation, the Jacob K. Javits/Biaggi Bill, H.R. 3263. They were, however, supportive of federal financial incentives to the states for the purpose of promoting local gifted and talented programs. This part of the study was of particular interest to this researcher since a major thrust of the proposed federal legislation is designed to provide a new national focus on the educational needs of gifted and talented children. It is this researcher's belief that if sufficient federal emphasis is forthcoming, the states will respond accordingly. Certification standards for principals can be changed to accommodate this national influence. The educational needs of exceptional children can be met. The skills and knowledge obtained by principals during their university preservice training would be expanded to include program components in gifted and talented education. A void in the educational process would have been filled.

**Purpose of the Study**

The major purpose of this study was to investigate the attitudes of the heads of programs for educational administration at selected universities and colleges toward programs in gifted and talented education. Furthermore, the study sought to determine the skills and knowledge needed by school principals to administer gifted and talented programs housed in their buildings. A third purpose of the
study was to investigate current program models in the field of educational administration, to determine if any of those models lends itself to incorporating gifted and talented program concepts into the training of school principals.

The final purpose of the study was to investigate the perceptions of the population of university professors concerning federal intervention in the education of gifted and talented children.

Objectives

To accomplish these purposes, the following objectives were studied:

Objective 1:
A. To describe the respondent population in terms of demographic and personal variables: academic position, gender, number of years in the present position, number of years in educational administration, university membership in The Council for Educational Administration (UCEA), and geographic representation.
B. To describe the respondent population in terms of whether their state currently requires special education coursework for the certification of school principals.
C. To describe the respondents in terms of their familiarity with currently proposed federal legislation for the education of gifted and talented children (HR 3263, 1985).
D. To describe the respondents' overall attitudes and perceptions regarding gifted and talented education programs.
Objective 2:
To describe the attitudes and perceptions of the respondent population with relation to levels of importance and levels of acquisition of specific skills and knowledge needed by principals to administer gifted and talented programs.

Objective 3:
To describe the respondents' perceptions of a need to change state certification standards for principals to include university coursework in gifted and talented education.

Objective 4:
To describe the attitudes of respondents toward the need for school principals already working in the field to acquire the described skills and knowledge by way of inservice workshop attendance.

Objective 5:
To describe the respondents' perceptions of the importance of including the skills and knowledge listed in the survey in preservice preparation programs for principals.

Objective 6:
To describe the respondents' perceptions of the level of acquisition of the skills and knowledge listed in the survey by principals in their preservice preparation.

Objective 7:
To describe the extent to which respondents agreed that coursework currently exists in preservice programs which addresses the skills
and knowledge needed by principals to administer gifted and talented programs.

Objective 8:
To describe the extent to which respondents agreed that the training models listed in the survey instrument were appropriate for providing principals with the necessary skills and knowledge to administer gifted and talented programs.

Objective 9:
To describe the extent to which this study may have implications for federal intervention in gifted and talented education.

Objective 10:
To describe the relationship between the respondents' perceptions of the importance and the level of acquisition of those skills and knowledge identified in the study.

Objective 11:
To describe the relationships between the independent and the dependent variables used within this study; including overall attitudes toward gifted and talented programs, personal and demographic variables, and selected variables concerning federal involvement in education.

Methodology

Population

The population for this study was the heads of programs in
educational administration at those universities and colleges which also offer the doctoral program in gifted education (N=49). A response rate of 43 (88%) was generated and considered acceptable, of which 39 surveys were useable.

Research Design

The nature and design of the study were descriptive-correlational. This permitted the researcher to describe the respondent professors on the variables of the study and also to determine the nature and strength of relationships between the variables. Descriptive treatment of each of the objectives was also completed.

Instrumentation

The survey instrument used in this study was a four-part questionnaire designed by the researcher following an extensive review of the literature. The final instrument, titled "Training Programs for Principals Questionnaire" was a revision of an earlier questionnaire. That earlier instrument, also constructed by the researcher, had been field-tested on a national population of 50 State Directors of Teacher Certification in July, 1986. Section I and Section II of the final questionnaire were derived from that earlier two-part, twenty-five question survey instrument.

Section I was designed to gather personal and demographic information about the respondents. This included academic position, gender, years of experience as head of program, and years of
experience in educational administration. Respondents were also questioned as to a special education coursework requirement for certification of school principals in their state. A final question in Section I was related to the respondents' familiarity with current federal legislation for gifted and talented education.

Section II consisted of ten questions and was designed to measure attitudes of the respondents toward gifted and talented programs. A five point Likert-type scale was used, ranging from 'strongly agree' to 'strongly disagree.' Questions in Section II included the need for gifted and talented education coursework during a principal's preservice training, state certification standards for school principals, local program services for gifted and talented children, and federal incentives to encourage state program support.

Section III was designed to measure the respondents' perceptions toward the importance of certain skills and knowledge needed by principals to administer gifted and talented programs. In addition, the perceived level of acquisition of those skills and knowledge reached by principals in the preservice training programs was measured. Ten basic areas of preparation were selected and included: philosophy, leadership, curriculum, supervision, evaluation, personnel selection, planning and organization, school law, school finance, and multi-cultural issues. Section III was constructed in such a manner that perceived levels of importance and perceived level of acquisition of skills and knowledge needed by principals to administer gifted and talented programs could be statistically compared.
The purpose of Section IV was to investigate five of the most common university preservice models for training school principals. The models selected for study were:

A. Administration in terms of Instructional Leadership
B. Administration in terms of Human Resource Development
C. Administration in terms of Staff Development
D. Administration - qua - Administration
E. Administration in terms of The Effective Schools Model.

Respondents ranked the models on a five-point scale from 'Best' to 'Least' in relation to how each model was perceived as lending itself to preparing school principals to administer gifted and talented programs. Scores were tabulated, ranked, and then totaled. Model preference was thereby indicated. The final page of the questionnaire allowed for respondents' input on the merits of the study.

Validity and Reliability of the Instruments

Content validity was achieved through a panel of experts. This panel (Appendix C) consisted of university professors, State Department of Education consultants, and school principals with gifted and talented programs housed in their buildings. The principals also represented elementary, middle, and high school levels. The panel members determined that the various sections of the questionnaire had adequately sampled skill and knowledge areas, current preservice models, and relative concerns in the field of preservice training for school administrators.
Reliability tests were conducted on Section II and Section III of the study. The ten items in Section II were investigated to measure consistent attitudes toward gifted and talented programs. A reliability analysis indicated that three items were not consistently contributing toward the measurement of attitudes. Subsequent analysis minus these three items yielded a Cronbach's alpha reliability coefficient of .70. Cronbach's alpha reliability coefficients were also established for the Importance and Acquisition subscales in Section III. This was done to determine the extent to which subscale items consistently contributed toward the measurement of the respective domains (Table 1, p. 87). Adequate reliability measures were determined for this section.

Data Collection

Data for this study were collected by means of a mailed survey instrument between October, 1986 and January, 1987. A twelve-page questionnaire, constructed by the researcher, was sent to the 49-member population, along with a cover letter describing the purpose of the study. Anonymity was guaranteed to the respondents as a method of encouraging participation in the study. Thirty-five returns were received from the first mailing. Non-respondents were sent a second copy of the survey with a letter urging their participation in the study (Appendix B). A total of eight surveys were returned from this second mailing. A response return of 43 (88%) was considered adequate to proceed with the study. Four surveys were not completed.
sufficiently and were judged invalid, reducing the final number to 39 (80%). Data were calculated using this final number of respondents.

Data Analysis

This section described how data from the study were analyzed to provide answers to the objectives of the study. The statistical package SPSSX 21 available at the Instruction and Research Computer Center (IRCC), The Ohio State University was utilized for managing, analyzing, and displaying the data in this study.

Descriptive statistics involving measures of central tendency, percentage and frequency distributions were computed to describe the respondents on the variables of the study. Paired t-tests were computed to see if significant differences existed between respondents' perceptions of level of importance and level of acquisition of each of the ten importance and acquisition subscales. The strength and nature of relationships between variables in the study were determined using correlational techniques. Thus, Pearson, point biserial, and phi correlation coefficients were computed to describe the relationships between variables. Chi square tests of independence were also calculated.

A summary of the results of this study, along with implications were presented in the following section.

Objective One:

To describe the respondent population in terms of personal and demographic information.
Academic Position

All respondents served as present or past heads of the program for training school administrators, or were serving as Dean or major professor in the Department of Educational Administration at their university. The respondents were therefore judged as qualified to complete the questionnaire.

Gender

Since the ratio of male to female respondents was 35 to 4, sex was not maintained as a variable in the study.

Years of Experience as Head of Program

Over half of the population (51%) had served five or fewer years in their present position. This suggested a relative newness to the role as head of programs for training school administrators.

Years of Experience in Administration

Substantial experience was indicated in the respondents' overall years of administration. A high proportion (82%) had completed ten years in the field, and 15 (38%) had finished twenty years or more. The mean for experience was 18.5 years. There was a moderate positive relationship between years of experience in administration with years of experience as head of programs (r=4.6, p>.05) using Pearson correlation coefficients.

UCEA Membership

Nearly half (46%) of the respondents represented universities which
were members of the University Council for Educational Administration (UCEA), a national organization existing since 1956 for the purpose of furthering research in the field of educational administration. Membership versus nonmembership in UCEA was not shown to be a significant factor in this study, except in Section IV. Respondents differed significantly on their ranking of the Effective Schools Model when comparing membership to nonmembership in UCEA.

**Geographic Representation**

Since the population pre-existed, no attempt was made to control geographic representation. Notation was made, however, to indicate that national representativeness and in fact exist for this study. Universities from each of the various regions of the United States were included (Table 11, p. 101).

**Special Education Coursework Requirement**

Prior to the passage of PL 94-142, The Education for All Handicapped Act in 1975, states had no special requirement for principals to work with exceptional children. A study done by Stile and Pettibone (1980) indicated that the number of states with such a requirement had risen to twelve within five years after the passage of PL 94-142.

The results of this study showed that 14 respondents were from states that had such a requirement, but only twelve different states were represented in this number due to duplicate universities located in the same state. No evidence was found to suggest that the number
of states requiring a special education certification requirement was increasing.

Familiarity with Proposed Federal Gifted and Talented Education Legislation (HR 3263, The Biaggi Bill)

Since 1984 attempts have been made; first by U.S. Senator Jacob Javits (NY), and currently by U.S. Representative Mario Biaggi (NY) to pass federal legislation that would re-establish the Office of Gifted and Talented within the Office of Education in Washington, D.C. Respondents were asked if they were familiar with these legislative attempts. From the population of 39 program heads, seven indicated some familiarity with the proposed legislation. Of those seven, only four favored the legislation becoming federal law. Calculation of Pearson correlation coefficients showed that respondents from states where coursework was required tended to be more familiar with the Biaggi Bill ($r_o = .35$, $p>.05$) (Table 66, p. 155).

Overall Perceptions of Gifted and Talented Programs

On Section II of the questionnaire, professors tended to reflect overall support for the statements regarding gifted and talented programs. Over two-thirds (69%) of the total responses recorded were marked as agreeing with those statements. Respondent attitudes evidenced strong support toward such concepts as: IEP's for gifted and talented children, mainstreaming, and school district responsibility for ensuring program services. There was agreement that principals needed university training to effectively administer
gifted and talented programs. There was also agreement that State Departments of Education and training institutions needed to work together in establishing the parameters for administrative certification. Finally, there was strong agreement that states would actively promote gifted and talented programs if federal financial incentives were available.

Objective Two:

To determine the attitudes of the respondent population in terms of perceived level of skills acquired by principals in their university training program to:

i. administer gifted and talented programs housed in their building

ii. supervise teachers working in gifted and talented programs housed in their building

iii. provide leadership in IEP team conferences for gifted and talented children

iv. work with parents on problems that relate to the gifted and talented programs.

It was agreed by the heads of programs that additional university training was needed, if principals were to obtain the skills necessary to administer gifted and talented programs. University training programs, it was further agreed, should provide principals with the knowledge base needed to understand and implement gifted and talented programs. There was strong support for planned workshop attendance,
but only moderate support for adding new courses to the current syllabus of required coursework.

Skill areas thought to be adequately taught in current administration courses as related to gifted and talented education were school law and school finance. Other learning domains of philosophy, leadership, curriculum and personnel were rated as minimally or not at all providing the skills required. Low rankings were also given to the training areas of supervision, evaluation, planning and organization, and multi-cultural issues, as they related to gifted and talented education.

Respondents indicated that principals were not obtaining the skills necessary to supervise, evaluate, or write job targets for teachers working with the gifted and talented programs. Also, while IEP's for gifted and talented children were seen as very important, respondents agreed that the principals were poorly trained for this task. Skills listed as necessary for working with parents and the community regarding the gifted and talented program were seen as very important to principals. Communication skills, however, were poorly acquired, as viewed by fifty-nine percent of the respondents.

Objective Two was also designed to question the respondents' perceptions of the level of knowledge obtained by principals in their university training programs to:

i. work within state guidelines for gifted and talented programs
ii. provide for the range of academic needs of gifted and talented students

iii. provide leadership for gifted and talented program development and implementation.

Survey respondents gave strong support to the principal's need for knowledge of state gifted and talented program guidelines, of recent court decisions, potential sources of litigation, and steps needed to assure continued funding of gifted and talented programs. These concepts, within the school law and school finance domains obtained high respondent agreement when related to importance and needed levels of skill acquisition.

Respondents were aware of the curricular variations needed by gifted and talented students. Support was given for such specific concepts as IEP's, curriculum compacting, differentiated instructional methods, grade acceleration, and correct aptitude-intellect levels of instruction. Concern was expressed, however, with the principals' low level of skill acquisition in the sub-area of curriculum.

Skills seen as needed by principals in the area of leadership included the ability to develop master schedules, provide teacher inservice, initiate a needs assessment study, and take an active role in the development of gifted and talented programs. Program heads questioned the level of acquisition of the leadership skills, often marking 'minimal' as their response choice.
Objective Three:

To determine a perceived need for change in current state certification standards.

A perceived desire for a change in state certification standards was determined to exist and centered around the need for better cooperation between State Departments of Education and training institutions. Respondents agreed that it was the responsibility of State Departments of Education to set the basic certification requirements. Strong support was also shown for states to provide assistance to universities in developing local options for meeting state certification standards. Since principals were seen as having a need of further training in the area of gifted and talented education and for inservice workshops, it was concluded that additional university coursework, with the infusion of gifted and talented education concepts would contribute to the elimination of this need.

Objective Four:

To investigate how administrators already working in the field could acquire the needed skills and knowledge to effectively administer gifted and talented programs housed in their buildings.

The method most generally recommended for working principals to gain the needed skills was through inservice workshop attendance. Written comments by the professors supported on-the-job learning experiences as well. The need for additional university training in this area had strong support, as did the need for a knowledge base
which allowed a better understanding of the educational needs of exceptional children.

Strong support evidenced by heads of programs for the skills and knowledge listed, coupled with their agreement that the skills were not being taught suggests that there has been no state or federal emphasis on providing the needed inservice experiences. Provisions within the Javits/Biaggi legislation would assist states with this need by providing leadership training funds, access to exemplary gifted and talented programs, and the dissemination of a wide selection of appropriate curriculum materials.

Objectives Five and Six:

The level of importance, along with the level of acquisition of the skills and knowledge listed in Section III of the survey instrument were studied in Objectives Five and Six. The purpose of this part of the study was to determine the perceptions of the program heads toward these concepts and then to make investigative comparisons.

Ten areas of training were selected from existing university preparation programs as described in the literature. These areas were philosophy, leadership, curriculum, supervision, evaluation, personnel, planning and organization, school law, school finance, and multi-cultural issues.

In the area of philosophy, heads of programs agreed (93%) that the principal should effectively interpret and communicate the school district's philosophy and goals for the gifted and talented program to
the teaching staff, parent groups, and the local news media. The acquisition level of this skill, however, was seen as 'minimal' or 'not at all' for sixty-four percent of the respondents.

A majority of the professors (67%) supported the leadership statement that the principal should demonstrate leadership skills by: taking an active role in student placement decisions, participating in the multi-disciplinary assessment team process, creating a gifted and talented program parent group, and by preparing regular communication releases concerning this program. The perceived acquisition level for this learning area was thirty-one percent 'adequate' and sixty-nine percent 'less than adequate'.

Curriculum skill areas for the principal included knowledge in curriculum design, construction of IEP's, curriculum compacting, and differentiated instructional methods for gifted and talented children. While numerous professors (64%) were unsure of the importance of this skill, a high proportion (80%) agreed this skill was not being adequately acquired by principals in their university preservice training programs.

In the area of supervision, seventy-four percent of the professors agreed it was important for the principal to provide for: grade acceleration opportunities, mainstreaming, and correct aptitude-intellect level of instruction, and for the inservice staff development of teachers. A majority (62%) of respondents, nonetheless, marked this area as less than adequately obtained as a skill by principals.
It was determined by eighty-four percent of the program heads that principals should be skilled in the evaluation areas of: assessing teacher performance, setting job targets, prescribing remedial measures for teachers working in the gifted and talented program, and appraising the quality of the program. Less than half (44%) of the respondents marked these skills as being adequately acquired in the training programs.

A high proportion (77%) of the survey respondents agreed the principal needed to exhibit personnel skills when: interviewing teacher candidates, determining the necessary characteristics and level of teacher training, and recommending the most highly qualified persons for employment or promotion into the gifted and talented program. More than half (59%) of the surveys showed this skill not receiving an adequate rating of acquisition.

The planning and organization skills needed by principals and seen as important by program heads in this study were: initiating a gifted and talented needs assessment study, providing teachers with access to gifted and talented curriculum materials, and providing for continuous identification of children who could benefit from the program. The skill to develop a creative, flexible master schedule which would demonstrate advocacy of the gifted and talented program was also a segment of this training area. Eighty-two percent of the professors supported the importance of these skills, and yet only forty-four percent rated these skills as being adequately acquired by principals.
School law and school finance were the two training areas where the university program heads determined that the skills were of extreme importance and were being taught at an acceptable level. In the school law area, all respondents gave some measure of importance to the principals: studying current state standards for gifted and talented programs, reviewing recent court decisions effecting those programs, resolving potential sources of litigation, and maintaining a complete and accurate student records system. In this area, most (72%) of the respondents agreed that these skills were being acquired at an acceptable level.

The same was true in the area of school finance, where all (100%) of the surveys returned indicated this area was of importance to principals. Those skills seen as needed were: to assure gifted and talented program compliance for continued state funding, utilize the allocated resources to achieve building priorities, anticipate annual budgetary program needs, and maintain a financial accounting of the building equipment and materials used in the gifted and talented program. While the proportion of agreement (62%) was less for acquisition of skills in school finance than for school law, a definite majority of support was evidenced.

The final training area studied was related to multi-cultural issues. The survey instrument questioned whether principals had an awareness that the aptitudes and talents of some children within the gifted and talented population might be masked by such variables as: underachievement, language barriers, cultural deprivation, sexual
bias, minority racial representation, and handicapping conditions. The skill to recognize these potential problems was seen as important for all principals. A significant number of responses (44%) were marked as extremely important and an equal number (44%) as somewhat important. No one marked this skill as being unimportant. At the same time, nearly half (49%) of the professors saw this skill as being minimally or not at all acquired.

Objective Seven:

To determine if coursework, already in existence in the university training programs, would address the skills and knowledge needed by principals to administer gifted and talented programs. Only the training areas of school law and school finance were given adequacy ratings to indicate the suggested skills would be covered by current coursework. Multi-cultural issue concerns similarly reached a bare majority proportion (51%) of adequacy. Most of the training areas investigated were not providing the suggested skills and knowledge to principals as a part of current training programs.

Objective Eight:

To determine which of the various training models best prepared school principals to administer gifted and talented programs. Following an extensive review of the literature, five of the most common training models were selected for research in this study.
The models selected were:

Model A - Administration in terms of Instructional Leadership
Model B - Administration in terms of Human Resource Development
Model C - Administration in terms of Staff Development
Model D - Administration - qua -Administration
Model E - Administration in terms of the Effective Schools Model

Program heads ranked the five models from 'best' to 'least' in relation to how each model would prepare school principals to administer gifted and talented programs. Tabulated scores were weighted and totaled with the result that Model A, Instructional Leadership was perceived as the model best suited to the task of preparing principals. Model B, Human Resource Development also received support as a good training model for the stated task. Professors agreed that Model D, Administration-qua-Administration did not lend itself to providing principals with the skills and knowledge needed for administering gifted and talented programs. Weighted total scores for the five models were:

- Model A: 158
- Model B: 147
- Model C: 99
- Model D: 75
- Model E: 106

Objective Nine

To research the extent to which this study may have implications for federal intervention in gifted and talented education.

Chapter II (p. 23) reviewed recent attempts to pass federal legislation and to strengthen gifted and talented education. Those
ongoing attempts reflected a positive federal interest. Various segments of this study revealed support from the university program heads for federal intervention in education.

Although a low percentage of respondents (18%) were familiar with current federal legislation effecting gifted and talented education, a high percentage of professors (85%) agreed that federal incentives would encourage states to promote those programs. Fourteen (36%) respondents lived in states wherein previous federal legislation (PL 94-142) had influenced changes in certification standards to include special education coursework.

The entire population of professors gave support to training programs which guaranteed principals' awareness of children whose aptitudes could be masked by such special conditions as underachievement, language barriers, cultural deprivation, sexual and racial biases, and physical handicaps. The proposed federal legislation (S 303 and HR543, 1987) provide that the various handicapping conditions as language barriers and economic deprivation be addressed in the implementation of the law.

Objective Ten:

Objective Ten used statistical calculations to verify the relationship between the respondents' perceptions of the importance and level of acquisition of skills and knowledge identified in the study. Significant differences were found. This reinforced the researcher's concern that while the listed skills and knowledge were seen as important, acquisition had not reached an acceptable level.
Objective Eleven:

Objective Eleven employed statistical computations to investigate the interrelationships among the variables of the study. Positive relationships were found between years of experience as head of programs and the respondents' overall attitudes toward gifted and talented programs. The greater the experience the more favorable were the attitudes collectively as well as specifically. Professors from states where special education coursework was required for certification tended to be more familiar with proposed federal gifted and talented education legislation. Finally, UCEA membership while not significantly related to other variables in the study, did effect rankings on the training models investigated.

Conclusions

The following conclusions are offered as a means of summarizing the findings of this study.

1. Attitudes toward gifted and talented education by the population of university professors were favorable. Responses to attitudinal questions were consistently positive as evidenced by support for additional training, improved skill and knowledge acquisition, and the perceived role of the building principal as an instructional leader. These positive attitudes may be taken as an indication of support for greater emphasis to be placed within the university preservice training programs on gifted and talented education concepts.
2. Demographic and personal variables were investigated and showed that decidedly more male than female professors serve as the head of programs for training school principals. One could infer that the number of females who work in the field of educational administration has been limited. Secondly, years of experience as head of program were low when compared with years of experience in educational administration; the mean difference being ten years. A third variable, membership in the University Council for Educational Administration (UCEA), had no demonstrable effect on the study outside of a preference for the effective schools model by members of UCEA. National influence of UCEA on the field of educational administration was especially apparent in the promotion of internships for school administrators.

3. It was determined that existing university preservice programs were not providing school principals with the training needed to effectively administer gifted and talented programs housed in their buildings. Skills and knowledge listed in the study were perceived to be of significant importance to the building principals. Acquisition of those skills and knowledge, however was seen as being less than adequate. There was agreement that the skills and knowledge could be incorporated into existing university course syllabi. Current core teaching areas in university training programs were compatible with the ten training areas investigated in the study.
The training areas of school law and school finance were perceived as the two training areas currently meeting the needs of school principals to work with those particular gifted and talented education aspects. In truth, principals must be trained to work with all special programs as well as the general strand of school curriculum.

Training areas of curriculum, evaluation, and supervision have emerged as those most lacking in training programs for principals who administer programs for exceptional children. Needed skills for placement decisions, IEP team conferences, mainstreaming, differentiated curriculum, and program assessment were lacking in present training programs. This was evidenced in the degree of difference between levels of importance and levels of acquisition in these areas, as reported in the survey.

Of great need for principals was skill in the identification of children with debilitating problems which resist remediation, and which mask the child's true academic ability or talent.

In addition, principals already working in the field should improve their administrative skills through inservice workshops, seminars, and additional university coursework.

4. From this study it can be concluded that the university training models most suited to incorporating gifted and talented program concepts into their syllabi were 'Administration in Terms of Instructional Leadership' and 'Administration in Terms of Human Resource Development'. This was consistent with research in the literature of training programs, which included a current national
emphasis on these program models. The instructional leadership model involves the site administrator in the actual teaching process, while the human resource model invites the staff into the decision-making process. Concepts from both models were seen as advantageous for an effective school administrator.

5. Implications for federal involvement in gifted and talented education were addressed in the study from several different perspectives. Federal financial incentives were researched as a method of ascertaining state support for gifted and talented programs. It can be concluded that states have the basic responsibility for ensuring that local school districts provide the proper educational services to exceptional children. These services, according to the proposed Javits/Biaggi Bill (H.R. 543) are necessary for gifted and talented children and are in addition to or beyond the standard curriculum. Support for federal legislation effecting gifted and talented education was more evident in states which required special education coursework as part of administrative certification standards. This suggests that those states, following the passage of PL 94-142, The Education for All Handicapped Act, in 1975, changed their certification standards. That number of states, twelve, has remained static since 1980.

Several studies reported that recommendations for a change in certification standards had been expressed to state departments of education, but with no positive results. Respondents in this study expressed satisfaction with their state's decision to employ this
requirement.

Lacking any overall federal mandate or incentive there would be little expectation for consistency in state certification standards. Federal compliance legislation in this area, if enacted could provide for the following:
- consistency in certification standards from state to state
- a need for state departments of education and training institutions to work together to implement federal regulations
- a need for training institutions to review and expand their philosophy regarding the components of their administrative training programs
- working principals, in order to be in compliance with new certification standards would avail themselves of state-sponsored inservice opportunities
- local school districts would provide the needed educational service delivery system to exceptional children.

Recommendations

Recommendations based on the findings of this study include the following statements.

1. It is recommended that state certification requirements assure that principals complete formal training in the administration of gifted and talented programs. This should include pertinent aspects of curriculum, supervision, evaluation and others as provided, with special attention given to multi-cultural and handicapping issues.
2. It is recommended that a generic program model be devised for training school administrators which encompasses the skills and knowledge described in this study. (Figure 1)

3. It is recommended that university departments of educational administration, as they design their preservice training program for school administrators, build gifted and talented program concepts into the basic core curriculum components of their syllabus.

4. It is recommended that federal legislation be passed that would stimulate state support of gifted and talented programs while providing a national focus for the advancement of gifted and talented education.

5. It is recommended that a similar study be conducted using a population of school principals to investigate their perceptions of the importance and acquisition factors of the skills and knowledge listed in this study.

6. It is recommended that this study be replicated with a larger population at a time following the passage of the necessary federal gifted and talented legislation, for the purpose of measuring the impact of such legislation on state certification requirements and university core curriculum content.
Final Summary Statement

Recommendations presented herein suggest there is considerable work to be done to resolve the educational service gap that exists for gifted and talented children in our schools today. Much of the literature in the field suggests that the building principal is the key to the success of all educational programs. Without a thorough knowledge base and adequate skills, a principal can only attempt to perform as an instructional leader. With those skills and knowledge, however, the principal is the effective leader. Those skills and knowledge should come from the university training programs.

Federal support legislation can provide a national focus on this educational service gap by encouraging states to take a leadership role in fostering local programs. State departments of education and training institutions will bridge this gap, given specific and clear direction.
LIST OF FIGURES
FIGURE 1

A Generic Program for Training Principals

I. Prerequisites:
1. Three years of successful teaching experience
2. Specific Grade Point Average
3. Interview with a University Review Committee
4. Narrative composition displaying writing skills
5. Letters of recommendation

II. Basic Core Curriculum

1. Philosophy
2. Leadership
3. Curriculum
4. Personnel
5. Supervision
6. Evaluation
7. Planning & Organization
8. School Law
9. School Finance
10. Multi-Cultural Issues

III. Structural Components

1. Seminars with other trainees
2. Planned internship with a practicing administrator
3. Field experience and visitations to various schools
4. Coursework in the education of exceptional children
5. Written final examination

IV. Specific Requirements of A Training Program

1. Incorporating gifted and talented, handicapped, and multi-cultural concepts into the syllabus
2. Two elective courses in the education of exceptional children
3. Coursework or experiences in vocational education
4. Bilingual program component
5. Computer technology related to educational administration
APPENDIX A

SUMMARY OF ADDRESS BY A. HARRY PASSOW
APPENDIX A

Dr. A. Harry Passow, noted author in the field of gifted education recently addressed a New Jersey Forum for Gifted Education (1985) in which he outlined the leadership skills needed by administrators in providing education for gifted and talented students. He suggested that the following administrative practices are necessary:

1. Good administrative practice makes possible the involvement of the faculty, and at appropriate points, the community in arriving at a consensus to the operational conception and philosophy of the gifted program.
2. Administrative practice requires leadership in seeing that comprehensive planning takes place.
3. Systematic curriculum and staff development must be planned for from the beginning.
4. Understanding and dealing with the problems, real and perceived, experienced by the teachers of the classes from which such youngsters come and the special classes are essential to an effective program.
5. Administrative leadership would promote a better understanding of what kinds of grouping will facilitate instruction rather than continue the debate as to whether to group homogeneously or heterogeneously.
6. Administrative leadership must consider various alternative procedures and select those most appropriate to implementing the particular program.
7. The effective development of gifted and talented pupils should be monitored as part of the total talent development process.
8. In order to provide adequately for gifted and talented students, learning opportunities must be extended into the community, enriching the resource base, both human and material.
9. Administrative leadership must attend to the creation of an atmosphere and climate in which the idea that all children and youth are entitled to an adequate and appropriate differentiated education is fostered.
10. Education of the gifted involves the total learning experience provided and in such planning, administrative leadership is absolutely essential.
APPENDIX B

CORRESPONDENCE
July 4, 1986

Dear : 

I am currently enrolled as a doctoral candidate at The Ohio State University in the field of special education administration/gifted programs. I am also a retired school superintendent, having spent 25 years in education in Ohio: six years as a principal and seventeen as superintendent. In order to complete my doctoral degree I am conducting a study on attitudes toward gifted education in preservice training programs for school principals. The target population of the study will be the head of the department of educational administration at selected universities where gifted programs at the graduate level are available.

I am asking that you, as part of a well-defined population of professional educators, the State Directors of Teacher Certification, help validate the enclosed survey instrument. This can be accomplished by your completing the questionnaire in its present form and thereby helping correct survey-type errors. The results obtained from this study may help in future decisions regarding preparation of school principals.

It will be greatly appreciated if you will take a few minutes from your busy schedule to complete the survey and return it in the enclosed envelope.

Thank you for your most valued assistance.

Sincerely,

Enclosure
October 9, 1986

Dear : 

I am currently enrolled as a doctoral candidate at The Ohio State University in the field of special education administration/gifted programs. I am also a retired school superintendent, having spent 25 years in education in Ohio: six years as a principal and 17 as superintendent.

In order to complete my doctoral degree I am conducting a study on attitudes toward gifted education in the preservice training programs for school principals. The target population of the study are the heads of programs for training educational administrators at colleges and universities where programs in gifted education are offered at the post-graduate level.

A study of the literature has indicated an existing void in course offerings required for school principals in the area of special education/gifted programs. The purpose of this study is to describe the attitudes of the respondents in relation to this void. The results obtained from this study may help in future decisions regarding the preparation of school principals.

It will be greatly appreciated if you will take a few minutes from your busy schedule to complete the survey and return it in the enclosed envelope. Be sure to fill in your name and address if you wish to receive a copy of the results. Thank you for your assistance.

Sincerely,

Enclosure
APPENDIX B

CORRESPONDENCE

November 1, 1986

Dear :

Enclosed is a second copy of my dissertation research survey form titled "Training Programs for Principals Questionnaire". Your input is extremely important to the success of this project. Only heads of programs for educational administration at universities which also offer a doctoral degree in gifted education are being sampled. It is not a large population.

An important question exists: "What skills and knowledge are necessary for school principals to administer special programs housed in their building?" This study is an attempt to help answer this question, especially as it related to gifted and talented programs.

Your perceptions are important from a professional standpoint. Your geographical representation is also very important. Please take a few minutes to respond to the survey and return it in the enclosed envelope. Confidentiality remains assured. Your efforts will be greatly appreciated.

Sincerely,

Phillip C. Slaymaker
Doctoral Student
Ohio State University

Enclosure
APPENDIX C

PANEL OF EXPERTS
APPENDIX C

PANEL OF EXPERTS

Dr. Donald Cavin
Department of Human Services Ed.
Nisonger Research Center
The Ohio State University
Columbus, OH 43210

Mr. George Fichter, Consultant
Gifted & Talented Programs
Division of Special Education
The Ohio State University
Columbus, OH 43210

Ms. Karen Saunders, Consultant
Learning Disabilities Program
Division of Special Education
Ohio Department of Education
Columbus, OH

Dr. Catharine Reynolds
Department of Human Services Education
The Ohio State University
Columbus, OH 43210

Dr. Raymond H. Swassing, Jr.
Gifted & Talented Education Program
Department of Human Services Education
The Ohio State University
Columbus, OH 43210

Dr. Thomas M. Stephens
Associate Dean
College of Education
The Ohio State University
Columbus, OH 43210

Dr. Walter G. Hack
Educational Administration Program
Department of Education, Policy & Leadership
The Ohio State University
Columbus, OH 43210
Mr. Ronald Morvai, Principal
Mansfield Senior H.S.
Mansfield City Schools
Mansfield, OH 44903

Mr. Doug Castle, Principal
Appleseed Middle School
Mansfield City Schools
Mansfield, OH

Mrs. Sondra Asher, Principal
West 5th St. Elementary
Mansfield City Schools
Mansfield, OH

Mrs. Virginia Poling, Principal
Maplehurst Elementary School
Norwalk City Schools
Norwalk, OH
APPENDIX D

SAMPLE OF SURVEY QUESTIONNAIRE
APPENDIX D

TRAINING PROGRAMS FOR PRINCIPALS QUESTIONNAIRE

Instructions:

Please complete the questions in Section I before answering the attitudinal questionnaire. All responses will be held in strict confidence and the questionnaire will be destroyed after the information has been tabulated. Please fill in your name and address if you wish to receive a copy of the results of the study.

Section I.

Specific data concerning you as an administrator are necessary to this survey and to further research. Please place an X in the proper space, where applicable.

1. Are you the head of the programs for educational administration at your university? Yes ___ No ___
2. If not, what is your current title? _____________________________
3. Sex: Male ___ Female ___
4. Number of years in your present position ___
5. Is coursework in special education required for the certification of school principals in your state at this time? Yes ___ No ___
6. Are you familiar with the Biaggi Bill (H.R. 3623), The Gifted and Talented Youth Education Act of 1985? Yes ___ No ___
   (If no, skip Question 7)
7. CONTINGENCY: If yes, do you think the Biaggi Bill should become law? Yes ___ No ___

(UNDisplayable)

Name ________________________________ Address ________________________________
City ________________________________ State _______________ Zip ____________

207
TRAINING PROGRAMS FOR PRINCIPALS QUESTIONNAIRE

Section II.

This section of the questionnaire has been devised to measure your attitudes toward current preservice training programs for school principals. Please circle the response that most closely represents your personal opinion.

Please use the following key in responding to the questions in this section:

- Strongly Agree (SA)
- Agree (A)
- Undecided (U)
- Disagree (D)
- Strongly Disagree (SD)

1. There is a current need for school principals to obtain additional university training in the area of gifted and talented education programs.

   SA  A  U  D  SD

2. University training programs should provide school principals with the knowledge base needed to understand and implement programs in gifted and talented education.

   SA  A  U  D  SD

3. Principals can prepare themselves to work effectively with gifted and talented programs through planned inservice workshop attendance.

   SA  A  U  D  SD

4. University programs leading to state certification of public school principals should include coursework in the education of gifted and talented children.

   SA  A  U  D  SD

5. State Departments of Education should be responsible for establishing the minimum certification requirements for school principals.

   SA  A  U  D  SD
6. State Departments of education should assist the universities in developing local options for meeting the minimum certification requirements for school principals.

SA A U D SD

7. Elementary school principals are supportive of the mainstreaming of gifted and talented children into the regular classroom.

SA A U D SD

8. IEP's should be written for students enrolled in gifted and talented programs.

SA A U D SD

9. Each school district should provide for the identification, placement, and program services for gifted and talented children.

SA A U D SD

10. States would actively promote gifted and talented programs if federal financial incentives were available.

SA A U D SD
Section III.

This section of the questionnaire has been devised to measure your attitudes toward the importance of certain skills and knowledge needed by principals and also how well those skills and knowledge are acquired by principals within their university preservice training program.

Directions: Please respond to each item. In Column A, circle the number that best describes your attitude toward the importance of the skills and knowledge needed by principals. In Column B, circle the number that best describes how well the skills and knowledge are acquired by principals.

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent are the following skills and knowledge important to building principals?</td>
<td>To what extent are the following skills and knowledge normally acquired by principals within their university preservice training?</td>
</tr>
<tr>
<td>1. Extremely</td>
<td>1. Very adequately</td>
</tr>
<tr>
<td>2. Somewhat</td>
<td>2. Adequately</td>
</tr>
<tr>
<td>3. Slightly</td>
<td>3. Minimally</td>
</tr>
<tr>
<td>4. Not Important</td>
<td>4. Not at all</td>
</tr>
<tr>
<td>5. Undecided</td>
<td>5. Undecided</td>
</tr>
</tbody>
</table>
### TRAINING PROGRAMS FOR PRINCIPALS QUESTIONNAIRE

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Philosophy</td>
<td>2. Adequately</td>
</tr>
<tr>
<td>2. Leadership</td>
<td>3. Not At All</td>
</tr>
<tr>
<td>3. Not Important</td>
<td>4. Minimally</td>
</tr>
<tr>
<td>4. Somewhat</td>
<td>5. Undecided</td>
</tr>
<tr>
<td>5. Extremely</td>
<td>1. Very Adequately</td>
</tr>
</tbody>
</table>

#### 1. Philosophy

The principals can effectively interpret and communicate the school district's philosophy and goals for the gifted and talented program to:

- a. The teaching staff
- b. Parent groups
- c. Local news media

#### 2. Leadership

The principal demonstrates leadership skills by:

- a. Taking an active role in student placement decisions
- b. Participating in the multi-disciplinary assessment team process
- c. Creating a gifted and talented program parent group
- d. Preparing regular communication releases to the staff, parents, and central office administration concerning gifted and talented program issues.
### 3. Curriculum

The principal is knowledgeable in:

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Extremely</td>
<td>1. Very Adequately</td>
</tr>
<tr>
<td>2. Somewhat</td>
<td>2. Adequately</td>
</tr>
<tr>
<td>3. Not Important</td>
<td>3. Minimally</td>
</tr>
<tr>
<td>4. Undecided</td>
<td>4. Not at All</td>
</tr>
</tbody>
</table>

- a. Gifted and talented curriculum design.
- b. Construction of individual educational plans for gifted and talented children.
- c. Curriculum compacting for gifted and talented children.
- d. Differentiated instructional methods for gifted and talented children.

### 4. Supervision

The principal provides for:

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Extremely</td>
<td>1. Very Adequately</td>
</tr>
<tr>
<td>2. Somewhat</td>
<td>2. Adequately</td>
</tr>
<tr>
<td>3. Not Important</td>
<td>3. Minimally</td>
</tr>
<tr>
<td>4. Undecided</td>
<td>4. Not at All</td>
</tr>
</tbody>
</table>

- a. Grade acceleration opportunities.
- b. Non-isolation of gifted and talented children.
- c. Correct aptitude-intellect level of instruction.
- d. Inservice staff development.
## TRAINING PROGRAMS FOR PRINCIPALS QUESTIONNAIRE

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Extremely</td>
<td>1. Very Adequately</td>
</tr>
<tr>
<td>2. Somewhat</td>
<td>2. Adequately</td>
</tr>
<tr>
<td>3. Slightly</td>
<td>3. Minimally</td>
</tr>
<tr>
<td>4. Not Important</td>
<td>4. Not at All</td>
</tr>
<tr>
<td>5. Undecided</td>
<td>5. Undecided</td>
</tr>
</tbody>
</table>

### 5. Evaluation

The principal is skilled in:

a. Assessing teacher performance in the gifted and talented program.

b. Setting job targets for teachers in the gifted and talented program.

c. Prescribing remedial measures for teachers in the gifted and talented program.

d. Appraising the quality of the gifted and talented program.

### 6. Personnel

The principal exhibits skills in:

a. Interviewing teacher candidates for the gifted and talented program.

b. Determining the characteristics necessary for teachers of gifted and talented children.

c. Determining the level of training necessary for teachers of gifted and talented children.

d. Recommending only the most highly qualified persons for employment or promotion into the gifted and talented program.
TRAINING PROGRAMS FOR PRINCIPALS QUESTIONNAIRE

Column A

|-------------|------------------|------|------------------|-------------------|

7. Planning and Organization

The principal demonstrates organizational skills by:

- a. Initiating a gifted and talented needs assessment study.
- b. Providing teachers with access to gifted and talented curriculum materials.
- c. Providing for continuous identification of children who can benefit from the gifted and talented program.
- d. Developing a creative, flexible master schedule which demonstrates advocacy of the gifted and talented program.

8. School Law

The principal demonstrates knowledge in school law by:

- a. Studying current State standards for gifted and talented programs.
- b. Reviewing recent court decisions which affect gifted and talented programs.
- c. Resolving potential sources of litigation.
- d. Maintaining a complete and accurate student records system.
<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Extremely</td>
<td>1. Very Adequately</td>
</tr>
<tr>
<td>2. Somewhat</td>
<td>2. Adequately</td>
</tr>
<tr>
<td>3. Not Important</td>
<td>3. Minimally</td>
</tr>
<tr>
<td>4. Undecided</td>
<td>4. Not at All</td>
</tr>
</tbody>
</table>

### 9. School Finance

The principal has the skills to:

- a. Assure gifted and talented program compliance for continuous State funding.
- b. Utilize allocated resources to achieve building priorities.
- c. Anticipate annual budgetary needs for the gifted and talented program.
- d. Maintain a financial accounting of building equipment and materials used in the gifted and talented program.

### 10. Multi-cultural Issues

The principal has an awareness for children within the gifted and talented population whose aptitudes and talents may be masked by:

- a. Underachievement.
- b. Language barriers.
- c. Cultural deprivation.
- d. Sexual bias.
- e. Minority racial representation.
- f. Handicapping conditions.
Section IV.

This section of the questionnaire has been devised to measure your attitudes toward various preservice models for training school principals.

Directions: Please rank the following in order. In your opinion, which model best prepares school principals to administer gifted and talented education programs housed in their building?

Please use the key provided and place the number of your response next to the relevant model.

Descriptions of the five models are included on the following page for your reference.

1. Best
2. Second best
3. Third best
4. Fourth best
5. Least

MODELS:

____ Administration in terms of instructional leadership.
____ Administration in terms of human resource development.
____ Administration in terms of staff development.
____ Administration - qua administration, a process emphasis.
____ Administration in terms of the effective schools model.
University training models of preparing school principals were researched in the literature. Five of the most prevalent models found are:

1. Administration in terms of instructional leadership - a model in which the principal contributes directly to the instructional process and takes an active leadership role.

2. Administration in terms of human resource development - a model wherein the principal takes a mentorship role in improving the educational skills of his or her staff.

3. Administration in terms of staff development - a model which encourages the principals to provide inservice leadership, professional growth opportunities, and meaningful faculty meetings to the staff.

4. Administration - qua administration - a model which uses general theories, concepts and constructs that are translated into behaviors and skills appropriate for various administrative positions.

5. Administration in terms of the effective schools model, which requires specific tasks for the principal in providing building leadership.
TRAINING PROGRAMS FOR PRINCIPALS QUESTIONNAIRE

Please use this space to write any comments you wish to make regarding this survey study. Your thoughts as to how preservice training programs for principals could incorporate training in gifted education would also be appreciated.

Thank you for your cooperation and assistance in the completion of this study.
APPENDIX E

TESTIMONY AND RELATED DOCUMENTATION
APPENDIX E

Testimony on behalf of proposed federal gifted and talented legislation

I. May 6, 1986 H.R. 3623 The Biaggi Bill

- Congressman Mario Biaggi (NY)
- Mr. George Fichter - representing the Coalition for the Advancement of Gifted Education (CAGE)
- Dr. James J. Gallagher, Kenan Professor, The University of North Carolina
- Mrs. Gina Ginsberg Riggs, Executive Director, Gifted Child Society, Inc.
- Mrs. Patti Bruce Mitchell, President, The Association for the Gifted (TAG)
- Mr. Fred Weintraub, Government Relations Specialist, The Council for Exceptional Children (CEC)
- Dr. William R. Nash, President, National Association for Gifted Children (NAGC)
- Dr. A. Harry Passow, J.A. Schiff, Professors, Teachers College, Columbia University, NY
- Congressman Nick J. Rahall, Jr., (W. Va.)
- Congressman Augustus F. Hawkins, Chairman, Subcommittee on Elementary, Secondary, and Vocational Education
- Dr. Yvette Jackson, Program Director, Gifted & Talented Unit, New York City Schools
- Mrs. Altamae Whitehill, Coordinator of Gifted Programs, Cheney Schools, Washington.

II. January 7, 1987 H.R. 543 and S. 303

The Jacob K. Javits Gifted and Talented Children and Youth Act of 1987

- Congressman Mario Biaggi (NY)
- Senator William Bradley (NJ)
### Expiring Authorizations

<table>
<thead>
<tr>
<th>Program</th>
<th>Expires</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 1, Education Consolidation and Improvement Act</td>
<td>9/30/87*</td>
</tr>
<tr>
<td>Chapter 2, Education Consolidation and Improvement Act</td>
<td>9/30/87*</td>
</tr>
<tr>
<td>Adult Education Act</td>
<td>9/30/88*</td>
</tr>
<tr>
<td>Bilingual Education Act, Title VII, Elementary and Secondary Education Act of 1965</td>
<td>9/30/88*</td>
</tr>
<tr>
<td>Impact Aid Acts, P.L. 81-874 &amp; P.L. 81-815</td>
<td>9/30/88*</td>
</tr>
<tr>
<td>Education for Economic Security Act (math and science)</td>
<td>9/30/88*</td>
</tr>
<tr>
<td>Magnet Schools Assistance</td>
<td>9/30/88*</td>
</tr>
<tr>
<td>Excellence in Education (discretionary grants for experimental programs to improve educational quality)</td>
<td>9/30/88*</td>
</tr>
<tr>
<td>Emergency Immigrant Education (for school districts impacted with immigrant and alien children)</td>
<td>9/30/89*</td>
</tr>
<tr>
<td>Indian education</td>
<td>9/30/89*</td>
</tr>
<tr>
<td>Women's Education Equity Act (discretionary projects to promote equity in education)</td>
<td>9/30/89*</td>
</tr>
<tr>
<td>Ellender Fellowship Program (fellowships for poor students to attend the Close Up Program on the Federal government)</td>
<td>9/30/89*</td>
</tr>
</tbody>
</table>
General Assistance for the Virgin Islands and Territorial Teacher Training (two special territorial programs) 9/30/89*

Anti-Drug Abuse Act of 1986 9/30/89*

Possible New Initiatives

Illiteracy and Even Start (a pre-school and adult literacy program)

Effective Schools

Dropout Prevention

Youth Suicide Prevention

Gifted and Talented Education

Technology Education

Audit Reform

Vocational training and re-training in a comprehensive trade bill

Possible preschool amendments which are likely to be addressed in reauthorization of Chapter I, Elementary and Secondary Education

Postsecondary Education

Expanding Authorizations

None in the 100th Congress

Other Legislation

Technical Amendments to the Higher Education Amendments of 1986

*All of these programs are subject to the automatic extension provision in the General Education Provision Act. This provision permits forward-funded programs to be considered extended for two additional years, and current-funded programs to be considered extended for one additional year, even if a reauthorization bill has not been enacted. This enables the Congress to make appropriations for the upcoming year for a program that has not been reauthorized yet. However, the Committee hopes to reauthorize all elementary and secondary education programs expiring in 1987-9 during the 100th Congress.
REFERENCES


Bugge, C. (1977). \textit{Level of confidence of administrators in small schools in Oregon relative to their ability to supervise special education programs.} Unpublished doctoral dissertation, Brigham Young University, UT.


The Ohio State University Educational Administration Certification Program: Student planning guide (1985 June), Columbus, Ohio, p. 6.


ERRATUM The following were inadvertently omitted from the preceding References section:


DeLeon, M. (1985). In Educational Administration, by Horowitz, D.


