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ABSTRACT
                A study examined the criteria used in hiring
"first-time" technology education teachers. A survey questionnaire
was mailed to a stratified, paired random sample of 652
administrators from 302 school districts in Minnesota, Iowa,
Missouri, Wisconsin, and Illinois. A total of 248 questionnaires were
deemed usable (38% return rate). Five general criteria areas
(academic preparation, personal traits, professional traits,
professionally related experience, and work experience/paid
employment) were rated for their importance, and individual specific
criteria were rated for importance within each general area.
Particular emphasis was placed on the field of technology education,
and an additional 28 criteria were rated. Personal traits were ranked
most important, followed respectively by professional traits,
academic preparation, professionally related experience, and work
experience. It was discovered that, when hiring first-time technology
education teachers, administrators are looking for healthy, outgoing,
enthusiastic, confident, caring teachers who know their subject
matter, like working with students, and are able to deliver their
course content effectively. Administrators are seeking teachers who
will use contemporary teaching techniques such as decision making,
problem solving, and simulations to instill traditional work values
within their students. (Thirty-four figures are included, and the
survey instrument is appended.) (MN)

Final Report
to the
Technical Foundation of America
San Marcos, Texas

Criteria For Hiring First Time Teachers,
With an Emphasis on Technology Education

Contract Number: 169-91-186

by
Dr. Roger A. Smith

Department of Industrial Education
and Technology

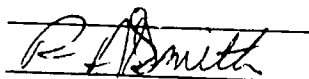Iowa State University
Ames, Iowa

December 31, 1992

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Abstract

The selection of teachers is a complex and personal decision. It has life long effects on the children placed under a teacher. Likewise, it has great personal and economic impact teacher candidate. In these times of dwindling teaching positions, large investments in schooling, and demanding competition for academic placement, many college students are seeking assistance in their job search. It becomes important for academic advisors and faculty members to inform students about the qualities administrators are looking for in hiring "first-time" teachers.

A research instrument was mailed to a sample of superintendents and principals in the states of Minnesota, Iowa, Missouri, Wisconsin, and Illinois to determine the criteria used in hiring "first-time" teachers. Five general criteria areas including: academic preparation, personal traits, professional traits, professionally related experience, and work experience/paid employment were rated for importance. Individual specific criteria were rated for importance within each general area. Particular emphasis was placed on the field of technology education and an additional 28 criteria were rated.

The results of this study showed that underlying factors were able to be determined for each of the 5 general criteria area. The most important of these factors was personal traits, followed by professional traits, academic preparation, professionally related experience, and work experience being least important. Administrators are looking for healthy, outgoing, enthusiastic, confident, caring beginning teachers who know their subject matter, like to work with students, and are able to effectively deliver their course content.

Administrators are seeking "first-time" technology education teachers who will instill traditional work values of pride and skill within their students. At the same time they want to employ teachers who use contemporary teaching techniques such as decision making, problem solving, and simulations. They want technology teachers to work cooperatively with the disciplines of math and science. In addition, they want teachers who know how to use the computer for general computing applications.

It is also apparent that administrators are confused about the field of technology education. As a disciple, technology education needs to continue informing administrators about the field, its philosophy, and its curriculum.

Criteria For Hiring First Time Teachers,

With an Emphasis on Technology Education

Introduction

The selection of staff is one of the most demanding tasks an administrator must perform. It may have life long effects on children and teachers as well as great economic impact. Likewise, the task is equally as difficult for the teacher candidate. In these times of dwindling teaching positions, large investments in schooling, and demanding competition for academic placement, many college students are seeking assistance in their job search. It becomes important for academic advisors and instructors to inform students about the qualities administrators are looking for in hiring first year teachers.

The pursuit of a university education is costly in terms of time, energy, and finances. The purpose of this education is to broaden one's personal perspective, provide a general background to make the graduate a more enlightened member of society, and instill the love of learning and give the tools needed to continue learning. Along with these goals a university education should help enable a graduate to obtain meaningful employment. In the case of professional education, leading to teacher certification, students often spend four to five years and tens of thousands of dollars pursuing a degree and then encounter difficulty obtaining a teaching position.

The selection of teachers by administrators is a complex and somewhat subjective task. There are many factors other than university course grades which influence the hiring of "first-time" teachers. Some of these include community involvement, extra curricular

activities, maturity level, personality, work experience, references, awards, and stated career objectives to identify a few. It is imperative that university teacher education students know specifically what administrators are looking for when graduates embark on their professional career. This is particularly true for technology education students because the number of positions is declining, programs are being eliminated, and competition is increasing.

Background

Not many studies have been conducted recently investigating the criteria used in hiring beginning teachers. Usually selected aspects of hiring criteria have been studied individually or the process for selecting a teacher is researched as a system. In 1966 Paquette (1966) studied the elements believed to be essential in student credentials. He found that personal data, educational history, work experience, and official transcripts were the top four elements of credentials considered important to employers. He found, however, that recruiter appraisal, executive appraisal, and personal data were considered more important than student credentials.

In a study conducted in 1979, Carney, Breuer, Isaack, and McMullan (1980) found that 100% of the educational recruiters (N=37) questioned, read and considered references when hiring teachers. Jackson, Sampson, and Loesch (1977) found the same thing to be true when they surveyed 100 college recruiters. They also found that references were ranked low when compared to other types of data in a student's placement file.

In a 1980 study by Jarchow (1981) of Iowa superintendents, she found that a neat looking résumé was important. She also found that some preference was given to married

students and those with extra-curricular activity expertise.

In a study for the Association for School, College, and University Staffing, Bryant (1978) found that the key factor in hiring inexperienced teachers was the applicant's maturity, initiative, interest, and other personal traits. The second key factor was their success at previous employment, and the third factor was the ability of the candidate to teach a second area.

In a study reported by Smith (1982), he found that maturity and student teaching references were the most important criterion used in hiring "first-time" teachers. He also found that marital status and military experience are the least important criteria used by Iowa administrators in hiring beginning teachers.

With many of the aforementioned studies presenting conflicting results or incomplete information, it is critical that teacher education students know what criteria are used to hire first time teachers. This is not an easy area to generalize because each situation is unique.

Purpose

The major purpose of this research study was to determine what traits and background are desired in new secondary level teachers by those who hire them. Also, the purpose of this study was to ascertain what additional criteria are used in hiring "first-time" technology teachers. To this end, five general research questions were posed:

1. What sources of information are used in making decisions regarding hiring "first-time" teachers in the upper midwestern states of Minnesota, Iowa, Missouri, Wisconsin, and Illino s?

2. What is the importance of the following general groupings of criteria in the hiring of "first-time" teachers: academic preparation, professional traits, professionally related experiences, personal traits, and work experience?

3. What is the importance of specific criteria identified in each grouping in the hiring of "first-time" teachers?

4. Can individual specific criteria can be grouped into larger, more general factors which influence hiring of "first-time" teachers?

5. What is the importance of specific criteria related to technology education in hiring "first-time" technology teachers?

Methodology

Subjects

The superintendents and secondary principals from the 2,846 school districts in the states of Minnesota, Iowa, Missouri, Wisconsin, and Illinois served as the population of this study. The districts of each state were stratified into nine layers (based on school district size categories from Market Data Retrieval Inc.'s: Curriculum Information Center's School Directory, Shelton, Connecticut) using information provided by each state's Department of Education. Using the sampling procedure by Snedecor and Cochran (1967, p.523-528), a stratified, paired, random sample of 652 administrators, from 302 districts, was identified. The sample consisted of pairs of one superintendent and one, or 10 percent, of the secondary principals in the district, which ever was greater.

Instrumentation

The research questionnaire was developed after a review of relevant literature. Specific

items were then formulated from this review. Also a review of over 100 different application forms yielded items, as did discussions with the Placement Director from the College of Education, Iowa State University, and four current secondary administrators. The initial instrument was reviewed by a consultant from the Statistical Laboratory, Iowa State University, and a pilot study was conducted with 10 current and former secondary principals and superintendents. After review of the results and comments from the pilot study, an eight page questionnaire was finalized as the research instrument. (The instrument can be found in Appendix A.)

Data Collection

The questionnaire, a letter of introduction, and a self-addressed stamped return mailer were sent to each of the 652 administrators in the sample during June, 1991. Three weeks after the initial mailing, a postcard follow-up was mailed. Of those sent out, 275 were returned and 248 questionnaires were usable. This yielded a 38 percent usable return.

Findings

Information On Those Completing The Instrument

Of the usable research questionnaires, 237 indicated their present administrative position. There were $N = 138$ (58.2%) principals, $N = 50$ superintendents (21.1%), and $N = 49$ others (20.7%). This last group was made up of personnel directors ($N = 24$, 49.0%), assistant or associate superintendents, most indicating their responsibility was for personnel ($N = 20$, 40.8%), curriculum directors ($N = 3$, 6.1%) and assistant principals ($N = 2$, 4.1%).

The highest degree obtained by those responding, were as follows: N=2 (.8%) with bachelor degrees, N=89 (37.6%) with masters degrees, N=74 (31.2%) with specialists degrees, and N=72 (30.4%) with doctoral degrees. These degrees were granted from 82 different universities with the largest number (N=31) earned at the various campuses of the University of Wisconsin.

The educational experience of those responding varied greatly. The mean number of years of teaching experience before entering administration was 8.7 years (SD 5.01, N=240) with a range from 1 to 35 years. The mean number of years of administrative experience of those responding was 16.4 years (SD 8.20, N=241), with a range of 1 to 38 years.

Of those reporting, N=210 (89.4%) were males, while N=25 (10.6%) were females. The mean age was 48.9 years (SD 7.00, N=239), with a range from 29 to 65 years.

The districts employing the sample administrators were quite diverse. The mean district enrollment was 13,184 pupils (SD 47,663, N=241) with a range of 77 to 450,000 students. The mean ACT scores for the districts' 1991 graduates was 21.26 (SD 1.773, N=132) with a range of 12 to 26, where an average of 58.7% (SD 16.03%, N=176) of the graduates took the exam. The mean per pupil expenditure for the districts represented was $4,393 (SD $1,543, N=197) with a range of $385 to $9,800.

Research Question 1-What sources of information are used in making decisions regarding hiring "first-time" teachers in the upper midwestern states of Minnesota, Iowa, Missouri, Wisconsin, and Illinois?

The administrators were asked whether they used eleven different sources of

information, including resumes, references, and the like. Figure 1 shows that most

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Insert Figure 1 about here

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administrators used nine of these common sources. Only about 40 percent used writing

samples and very few (N=9) used scores on the National Teachers Exam as a criterion in

hiring "first-time" teachers. Of the 30 comments given as responses in the "other" category,

use of the Selection Research Inc. (SRI) Teacher Preceiver Interview was most common

(N=9). The next most common response was to have the applicant teach a sample mini-

lesson (N=8).

Research Question 2-What is the importance of the following general groupings of criteria in the

hiring of "first-time" teachers: academic preparation, professional traits, professionally related

experiences, personal traits, and work experience?

The administrators were asked to rate the importance of each of the following five

criterion groups when hiring "first-time" secondary teachers: academic preparation,

professional traits, professionally related experiences, personal traits and work experience.

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Insert Figure 2 about here

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In viewing Figure 2, it can be seen that "personal traits" rated the highest and had a mean

of 4.44 (very important) and "work experience" was rated the lowest (3.73), however, still

important.

Research Question 3-What is the importance of specific criteria identified in each grouping in the hiring of "first-time" teachers? and, Research Question 4-Can individual specific criteria can be grouped into larger, more general factors which influence hiring of "first-time" teachers?

Administrators were asked to rate the importance of individual traits for each of the five criteria groups listed above. These ratings were then analyzed using a rotated factor analysis to determine their correlation with an underlying common factor. For each group there were a number of underlying factors determined.

Personal Traits. Forty-six specific personal traits were rated and their means and standard deviations are shown in priority order in Figure 3. Almost two-thirds of these (29)

Insert Figure 3 about here

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were rated higher than "4", indicating that the administrators thought these were very important. There was little variation in their opinion except on the item regarding "not having a criminal record." Items 35 through 41 were rated below a "3", or neutral. Those related to disabilities had much higher deviation than the first 33 traits. The highest deviations occurred on the items regarding U.S. citizenship, sexual orientation (homosexual-heterosexual), and lack of mental disabilities. Personal items such as race, religion, marital status, and number of children were rated as unimportant and had little deviation associated with them. Several administrators commented that these items cannot be considered under

the law when hiring individuals, and the findings confirm that they are not being considered.

The forty-six personal traits factored into five underlying qualities. Figure 4 shows

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Insert Figure 4 about here

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these factors. Each of the factors are individually shown in Figures 5 through 9 along with its component traits, each trait's correlation with the factor, and the mean rating of each trait. A grand mean was calculated indicating the importance of that underlying factor. Figure 5 shows that having self confidence, enthusiasm, and an outgoing personality is of utmost importance (mean 4.51) for an applicant to be hired as a "first-time" teacher.

Insert Figure 5 about here

A second underlying factor of being "stable and sensitive" was identified and is shown in Figure 6. It had a grand mean of 4.34, which indicated that the administrators viewed this factor as very important. Eleven individual traits made up this underlying factor including maturity, empathy, and tolerance of individual differences.

Insert Figure 6 about here

A third factor of "family status", shown in Figure 7, was rated as unimportant (mean 2.02) and includes traits such as marital status, family background, and age.

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Insert Figure 7 about here

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The "personal disabilities" factor, seen in Figure 8, was rated neutrally (mean 3.02) while Figure 9, the "physical and social characteristics" factor was rated as unimportant (mean 1.32).

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Insert Figure 8 about here

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Insert Figure 9 about here

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Eight of the 46 personal traits were not loaded into one of the five identified factors. These were the ones which had the highest deviation. No additional personal traits were identified by the administrators for inclusion in this section.

Professional Traits. The administrators in the sample were asked to rate the importance of 30 specific professional traits. Their ratings are shown in Figure 10 in priority order. There were 21 traits which were rated as very important, 7 rated as important and only 2 as neutral. None were rated as "unimportant" or lower. The ability to motivate students, professional integrity, and ability to provide a positive emotional environment were rated the highest professional traits desired in "first-time" teachers. Interest in participating in

research activities, interest in coaching a specific sport or directing a specific extra-curricular activity, and willingness to chaperon events were rated the lowest.

Insert Figure 10 about here

Insert Figure 11 about here

The 30 professional traits factored into 5 underlying qualities shown in Figure 11. The first of these was identified as "working with students and delivering content," Figure 12. As a factor it was rated as very important (grand mean 4.38) and accounted for 19.0% of

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Insert Figure 12 about here

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of the variance within "professional traits." Twelve professional traits made up this factor. Some of the traits included were: student evaluation, lesson planning, dedication, content delivery, and personal experience with the subject area.

The second underlying factor of "organization and management" accounted for 16.4% of the variance. Figure 13 shows this factor and its component traits. This factor is also

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Insert Figure 13 about here

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rated as very important by the administrators (grand mean 4.28). This factor includes classroom discipline, striving for excellence, knowing your subject matter, and continually up-grading oneself within the field.

Figure 14 shows the forth factor - being able to work with faculty, administrators, and parents. This factor had a grand mean of 4.29 which also was rated as very important.

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Insert Figure 14 about here

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Willingness on the part of "first-time" teachers to assist others outside of the classroom was rated as important by administrators (grand mean 3.25) and is the fourth professional factor. See Figure 15.

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Insert Figure 15 about here

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The last professional factor, "curriculum development," was rated as important (grand mean 3.51) and accounted for 4.4% of the variance. Figure 16 shows the 5 component traits composing this factor. Some of the traits included in this quality include: willingness to participate in professional upgrading and workshops, do professional reading, do curriculum development, and willingness to serve on committees. Under "other," the only trait which

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Insert Figure 16 about here

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was indicated more than once, was the ability to communicate effectively in front of the classroom (N=2).

Academic Preparation. The sample rated the importance of 19 academic preparation criteria in hiring "first-time" secondary teachers. The results of these ratings are shown in Figure 17. Of these, subject matter knowledge was rated the highest (mean 4.60). Success

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Insert Figure 17 about here

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in student teaching (mean 4.22), the applicant's major GPA (mean 4.03), and the subject matter area GPA (mean 3.93) were also rated highly. Knowledge of a foreign language (mean 2.11) and being able to teach English as a second language (mean 2.21) were rated as unimportant. The lowest ratings occurred in considering the ability of new teachers to write grants (mean 2.02) and conduct research (mean 2.01). In the comment section of "other" for this section, the importance of student teaching was mentioned by eight administrators. Two administrators also mentioned that they try to evaluate how well the applicant will "fit in" with the rest of the faculty. Two other administrators rated the knowledge of "Outcomes Based Education" (OBE) as very important.

The 19 identified traits under academic preparation factored into 4 underlying qualities which accounted for 44% of the variance. (See Figure 18.)

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Insert Figure 18 about here

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The most important of these factors was subject matter knowledge (grand mean 3.96).

Figure 19 shows that the GPA in the subject area, the GPA in the major, the overall GPA,

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Insert Figure 19 about here

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the grade in the student teaching experience, and the GPA in education classes all were part

of this factor.

Language skills, as demonstrated by knowledge of a foreign language, being able to

teach English as a second language, and being able to conduct research and write grants,

was a second underlying factor which was rated as unimportant (grand mean 2.26) Figure

20 shows that this factor accounted for 13% of the variance within "academic preparation".

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Insert Figure 20 about here

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The development of specific teaching skills was rated as being important (grand mean

3.39) and the traits within this factor are shown in Figure 21. Specific traits such as

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Insert Figure 21 about here

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knowledge and use of instructional technology, computer knowledge and skill, specific

courses taken, and diversity and length of student teaching all were part of this underlying

factor.

Preparation to coach a specific sport or direct as specific extra-curricular activity factored together as an underlying quality. (See Figure 22.) This factor was rated as important and obtained a 3.19 grand mean. All 19 of the specific traits grouped into one of the four factors identified for "academic preparation."

Insert Figure 22 about here

Professionally Related Experience. College students are often encouraged to broaden themselves and develop leadership by being active in school and community activities and organizations. The administrators who were in the sample also felt that this type of experience was important as indicated by the rating of this general category area (mean 3.93). However, when they rated the individual criteria within this area, their ratings were much lower, as seen in Figure 23. The highest rating (mean 3.96) occurred when the sample

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Insert Figure 23 about here

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rated the importance for "first-time" teachers to work with school age children. Also of importance (rating above 3.00) was involvement as a leader in youth groups, and being involved with professional education organizations. Awards and scholarships which the applicant my have obtained were considered important. The other 16 criteria were rated

as neutral and were rated 2.00 through 2.99. Included in these were activities such as involvement in music, drama, sports, fraternities, church, and student government.

The 24 specific criteria listed in this area factored into four identified qualities shown in Figure 24. The first of these factors was involvement in professional education

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Insert Figure 24 about here

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organizations. Figure 25 shows that this was rated as important (grand mean 3.09).

Insert Figure 25 about here

Included in this factor are such activities as involvement with professional and student educational groups as well as being part of a honorary or professional fraternity. The second factor, seen in Figure 26, relates to personal growth and leadership. This was rated

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Insert Figure 26 about here

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with a grand mean of 2.23 (neutral). The final two factors were rated as more important. Being involved as a student with community and outside of school activities is taken into

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Insert Figure 27 about here

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consideration when applying for a "first-time" teaching position. Figure 27 shows the importance of this(grand mean 2.81), particularly when the activity involves children. The last factor, shown in Figure 28, shows the importance (2.92) of being involved in school clubs and organizations.

Insert Figure 28 about here

Work Experience/Paid Employment. The final general area which was considered, dealt with the importance of paid work experience of the applicant. As a general area, this was rated with a mean of 3.73 (important). Figure 29 shows that 11 of the 15 specific criteria

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Insert Figure 29 about here

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were actually rated higher than that. A positive work ethic, as seen in low absenteeism (mean 4.76), good work quality (mean 4.73) and punctuality (mean 4.61) were rated highest. Location (mean 2.32) and size (mean 2.50) of the employer were rated lowest. There were 3 underlying factors identified from the 15 specific criteria. (See Figure 30). A positive

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Insert Figure 30 about here

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work ethic formed one factor, Figure 31, and was rated as very important (grand mean 4.47).

Insert Figure 31 about here

The second factor, interpersonal skills with others (Figure 32), included traits such as being

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Insert Figure 32 about here

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able to work with peers and supervisors. Working with children and generally having "people related" jobs were also part of this factor. It was rated as very important with a grand mean of 4.29. Factor 3, demographic information about the employer, was rated neutrally with a grand mean of 2.73. Figure 33 shows the specific traits making up this factor.

Insert Figure 33 about here

Research Question 5-What is the importance of specific criteria related to technology education in hiring "first-time" teachers?

One subject area which is changing rapidly is technology education. A changing curriculum, new delivery techniques and the management of new and expensive equipment and facilities challenges new teachers. Because of the demands placed on teachers in this particular subject area, the administrators forming the sample were asked to rate the importance of 28 specific criteria related to technology education. Figure 34 shows these

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Insert Figure 34 about here

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ratings. Six traits were rated as very important. They include: ability to instill pride of design and work in students (mean 4.38); ability to teach skill development (mean 4.36); ability to incorporate decision making (mean 4.27), problem solving (mean 4.26), and simulations (mean 4.05) into the class. They also rated interest in working cooperatively with math and science (mean 4.03) as very important.

They rated the ability to design new facilities (mean 2.92) and possessing an understanding of vocational funding sources (mean 2.88) as the lowest criteria. There was wide deviation shown on many of the lower rated criteria. Included in this group were the questions related to technology systems (physical, information, and biotechnology), industrial systems (manufacturing, communications, etc.) and trade oriented (woods, metals, etc.) curriculum.

Discussion And Conclusions

It would seem that the administrators of the upper midwest are fairly typical of administrators throughout the country. There is a high percentage of males and their education, experience, and age vary in a pattern that would seem typical. However, enormous differences exist within the school districts in this part of the country. One of the most apparent differences is the size of the districts. In this region, there are large metropolitan cities as well as small rural communities. But, how can the education received

by young people in this area be considered equal when there are districts with over 450,000 students while many others are under 100 students? Apparently, the education obtained in these districts is not the same, because the ACT scores ranged from 12 to 26. The most incredible difference observed, however, was the inconsistency in funding for the representative districts. How can students receive an equivalent education when one district receives $385 per pupil of funding while another receives $9,800 per pupil?

Further analysis of the data will be performed in order to determine if there are differences in the way administrators view each of the hiring factors identified in this study. When this study was conceived, pairs of administrator from the same district were chosen to determine if the administration within a district was consistent in its views on hiring of "first-time" teachers. There were insufficient pairs of administrators who responded to the study, and therefore, that aspect of the research could not be investigated. Additional responses perhaps could have been obtained if the study would have been conducted in February rather than June. when administrators are typically less involved. Also, several respondents ($N = 7$) indicated that the research instrument was too long and took too much time to complete. A shorter instrument may have resulted in a larger return.

It is apparent that school administrators in the upper mid-west still use the "traditional" application information for determining whom they will hire. It needs to be stressed to teacher education students that they need to create an excellent resume and be prepared for their interviews to obtain employment. It is also important that they do well on their student teaching and that their references reflect that fact.

It would appear that there may be some credence to the thought that "good teachers

are born, not trained." Personality and personal traits seem to be the most important criteria administrators use in hiring new teachers. As one principal stated in his comments, "I find that hiring for particular skills as opposed to sound personal qualities rarely pays off." Administrators are looking for healthy, outgoing, enthusiastic, confident beginning teachers who are also mature, stable and caring people.

Administrators want beginning teachers who like to work with students and are able to effectively deliver their course content. Concurrently, they want teachers who are organized, can motivate students, and maintain discipline in the classroom. They are also looking for teachers who are dedicated, creative, use various teaching strategies, and know how to plan their lessons. Today's teachers also have to know how to work with the other professionals in the schools as well as with the parents and others outside of the schools.

In addition to possessing strong personal traits, the beginning teacher must be academically prepared. Administrators are looking for teachers who know their subject matter and have demonstrated that knowledge through successful student teaching. They are also looking for candidates who have achieved academic success in their college studies as seen in their GPA. Importance is also placed on being sensitive to other cultures, knowing and using instructional technology, computers, and the like, as well as understanding current educational philosophy and practices. There appears to be little importance placed on foreign languages at this time. As one principal said, "In our district a teacher can be strong, well organized, and likeable, but if she is not competent, students will quickly lose respect. We tend to look for people who are strong in subject matter, who can relate to young people, who are willing to work and who possess enthusiasm and a sense

of humor."

Administrators are looking for professionally related experiences outside of the classroom. They are not consistent in indicating the experiences they desire. One administrator commented, "It is not important what they are in, but they should be in something outside of school." When teacher education students are in school, they should seek opportunities to work with school age children and get involved with professional education organizations. They also should become involved with clubs or activities associated with their chosen field of study.

Paid work experience is important to administrators, particularly as it demonstrates the new teacher's work ethic. Administrators are looking for people who are punctual, hard working, able to follow directions, and show quality in their work. They also want teachers who can get along with pupils, their peers and supervisors.

With regard to technology education, it appears that administrators are seeking "first-time" teachers who will instill traditional work values of pride and skill within their students. At the same time they want teachers who use contemporary teaching techniques such as decision making, problem solving, and simulations. They want technology teachers to work cooperatively with the disciplines of math and science. In addition, they want teachers who know how to use the computer for general computing applications.

It is apparent that administrators are confused about the field of technology education. As a disciple, technology education needs to continue informing administrators about the field, its philosophy, and its curriculum. Administrators do not understand the differences between technology systems, industrial systems, and a trade oriented curriculum.

Administrators feel it is important that teachers be knowledgeable in specialized computer applications such as CAD, CAM, and desk top publishing, but they feel it is less important to be familiar with "high tech" equipment such as lasers, robots, or satellites.

Conclusion

In the research instrument one principal wrote, "The hiring process is the most important task which a building administrator can devote his time and effort to." Each student in today's schools deserves outstanding teachers; teachers who care, are dedicated, knowledgeable of their subject, and know how to teach well. Likewise, each teacher education student deserves to know what it takes to be employed and how to obtain that employment. They have made a personal investment of time, energy and resources. "Tenure begins at hiring," one administrator wrote. "It is easier to not hire a questionable teacher than to dismiss them."

In order for the field of education to progress as a discipline, we must continue to seek answers to important questions, and continue to search for new knowledge and truth. To this end, researchers and funding agencies must work together to advance education for the good of the today's youth and the generations to come.

Budget Report

The following is a copy of the contract statement from the Accounting Office, Iowa

State University for the month ending November 30, 1992.

Contract Statement

Tech Fdn of Amer
Grant#: 16991186
Term: 02-15-1991 to 06-30-1992
Accountant: Nancy Nisbett
Phone: (515) 294-5279

Month ending 11-30-1992

400-27-31
SMITH ROGER A P
IND ED/TCH
221 I ED II

Account is cost reimbursable

Line Item	Budget	Month's Expense	Cumulative Expense	Unspent Balance	Encumbrance	Sal Past Term See *	Unencumbered
SAlaries	.00	.00	.00	.00	.00		.00
WAges	80.00	.00	260.70	180.70-	.00		180.70-
Benefits-Salaries	.00	.00	.00	.00	.00		.00
Benefits-Wages	.00	.00	2.76	2.76-	.00		2.76-
Travel-Domestic	400.00	.00	400.00	.00	.00		.00
Travel-Foreign	.00	.00	.00	.00	.00		.00
Contracted Services	.00	.00	.00	.00	.00		.00
SuPplies	669.00	.00	558.79	110.21	.00		110.21
OTher	600.00	.00	527.48	72.52	.00		72.52
Student Support	.00	.00	.00	.00	.00		.00
ProGram Income	N A	.00	.00	.00	.00		.00
Subcntrcts LE 25000	.00	.00	.00	.00	.00		.00
TOTAL MTDC	1,749.00	.00	1,749.73	.73-	.00		.73-
Subcntrcts GT 25000	.00	.00	.00	.00	.00		.00
EQuipment	.00	.00	.00	.00	.00		.00
Nonburdenable Sply	N A	.00	.00	SEE EQ	.00		SEE EQ
ADvances	N A	.00	.00	.00	.00		.00
TOTAL Direct Cost	1,749.00	.00	1,749.73	.73-	.00		.73-

****

Center shaded box is amount left to spend EXCLUDING encumbrances. White box at right is amount left to spend AFTER encumbrances.
Exception: If equipment to be purchased does not equal equipment budgeted. the statement is misleading.
The P.I. must request rebudgeting to make the statement useful.

Indirect Costs							
.00	.00	.00	.00	.00	.00		.00
.00	.00	.00	.00	.00	.00		.00
.00	.00	.00	.00	.00	.00		.00
.00	.00	.00	.00	.00	.00		.00
TOTAL Indirect Costs	.00	.00	.00	.00	.00		.00
TOTAL ALL COSTS	1,749.00	.00	1,749.73	.73-	.00		.73-

Key to exceptions:

**** Account is overspent - CV overdraft if no funds coming.

*** Receipts exceed budget - Process new supplemental budget if receipts are correct.

** Indirect cost in excess of budget. Rebudgeting is required.

* Form 111 extends beyond termination.

Cash Status	
Receipts	1,749.00
Allocations	.00
Total Available	1,749.00
Total Expenses	1,749.73
Cash Status	.73-

Incentive Account	Rate	Incentive This Month
NOT	YET	
AVAILABLE		

Restrictions:

References

Bryant, B. J. et. al., What employers consider important in hiring teachers. ASCUS Research Report, 1978. (ERIC Document Reproduction Service No. ED 196 838).

Carney, F. G., Breuer, D. A., McMullan, M. A., and Isaack, M. The references controversy. Journal of College Placement, Fall 1980, 41, 69-72.

Jackson, M. S., Sampson, J. P., and Loesch, L. C. Career-planning and placement services: evaluations by college recruiters and placement directors. Journal of Employment Counseling, 1977, 14, 39-45.

Jarchow, E.M. The hiring game. The Clearing House, 1981, 54, 366-369.

Paquette, J. W. Student credentials: what elements are really essential? Journal of College Placement, 1966, 26, 34-44.

Smith, R. A. Criteria for hiring industrial arts teachers. Industrial Arts: A Heritage of Technical Progress, 44th Annual and 11th International Conference, American Industrial Arts Association, Hartford, Conn., March 22-26, 1982.

Figures

Sources of Information
Percent of school districts using

Rank

Source	Percent
Resume 1	96.4
Student teaching ref 2	96.4
Transcript 3	95.6
Telephone references 4	92.7
Intuitive feeling 5	89.1
On-site interview 6	88.3
Screening interview 7	85.5
Application form 8	84.7
Personal references 9	81.9
Writing sample 10	39.9
Min. NTE test score 11	3.6

Percent (0, 20, 40, 60, 80, 100)
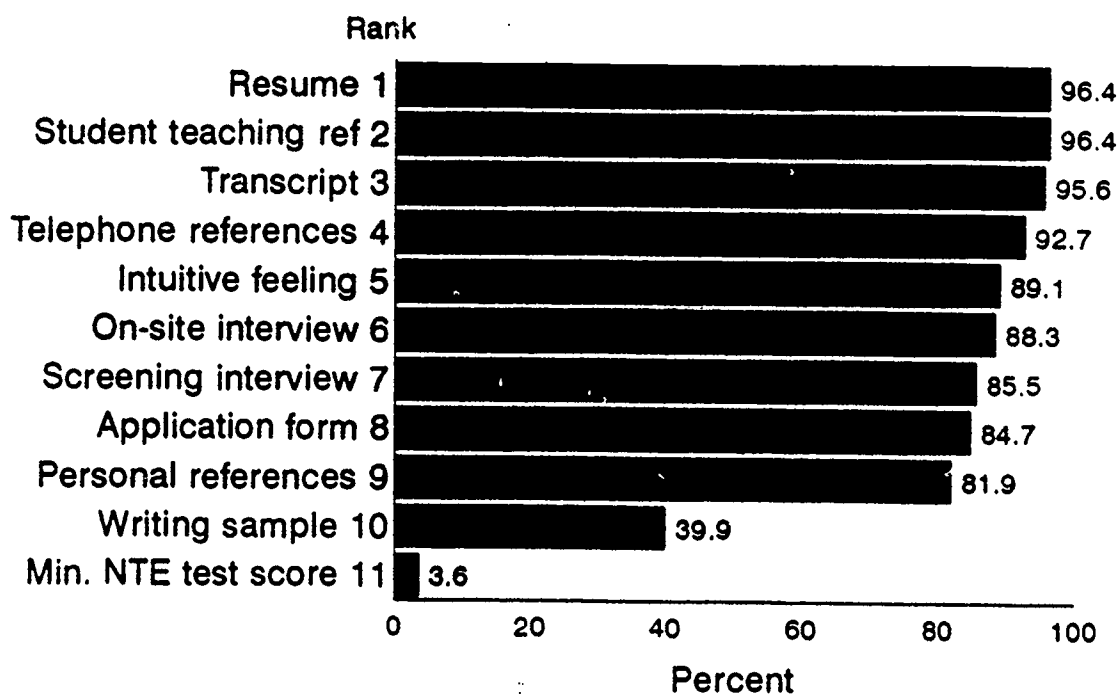
N=248

Figure 1. The percentage of administrator who use specific sources of information in hiring "first-time" teachers.

Criteria Used In Hiring "First-Time" Teachers
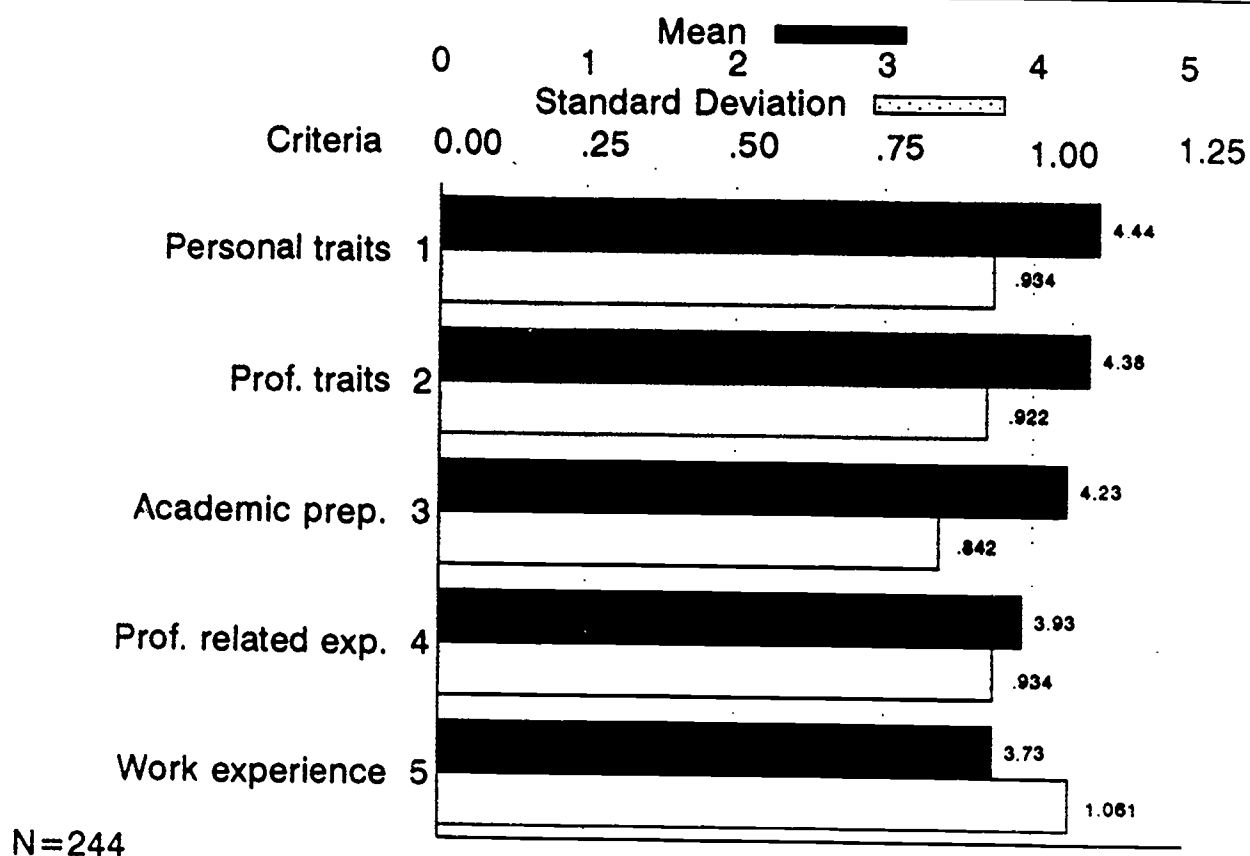
Figure 2. The list of general criteria areas as rated by administrators. There importance is shown with the administrators' mean ratings and standard deviations.

Personal Traits
importance of personal traits when hiring "first-time" teachers

Mean ▬▬▬▬

	0	1	2	3	4	5
Criteria		Standard Deviation ▭▭▭				
	0.00	.25	.50	.75	1.00	1.25	1.50

Criteria	Mean	SD
Enthusiasm 1	4.83	.552
Dependability 2	4.77	.577
Work with others 3	4.70	.631
Ethical 4	4.60	.692
Oral communication 5	4.60	.615
Initiative 6	4.59	.674
Industry 7	4.58	.659
Positive self concept 8	4.57	.641
Tol. individ. dif. 9	4.50	.701
High energy level 10	4.47	.715
Adaptability 11	4.46	.700
No criminal record 12	4.42	.997
Confidence 13	4.40	.695
Emotional stability 14	4.39	.744
Flexibility 15	4.38	.733
Patience 16	4.37	.727
Judgment/logic 17	4.37	.683
Listening skill 18	4.35	.695
Promptness 19	4.35	.731
Written communic. 20	4.32	.717
Sense of humor 21	4.28	.649
Optimism 22	4.26	.720
Sensitivity 23	4.26	.742
Empathy 24	4.26	.764
Persistence 25	4.24	.726
Maturity level 26	4.17	.695
Leadership 27	4.16	.735
Intellect 28	4.15	.687
Neatness 29	4.10	.850
Ability Work alone 30	3.92	.822
Followership 31	3.89	.766
Personal health 32	3.72	1.026
Appearance 33	3.68	.923
Lack-mental disabil. 34	3.60	1.377
U.S. Citizenship 35	2.87	1.489
Lack-medical disab. 36	2.50	1.178
Bilingual capabil. 37	2.27	.993
Lack-phys disabil. 38	2.24	1.139
Sexual orientation 39	2.19	1.437
Age 40	2.13	.998
Family background 41	2.09	.966
Gender 42.5	1.38	.767
Race 42.5	1.38	.845
Marital status 44	1.34	.702
Number of children 45	1.30	.667
Religious affil. 46	1.21	.594

N=242

35

Figure 3. The list of specific criteria within the "Personal Traits" area shown in priority order. Their importance is shown with the administrators' mean ratings and standard deviations.

Personal Traits
Rotated factor analysis

Error
56.8%

Physical and social
characteristics
4.1%

Personal disabilities
4.5%

Outgoing,
Enthusiastic, Self confident
i6.4%

Stable, Sensitive
12.9%

Family status
5.3%
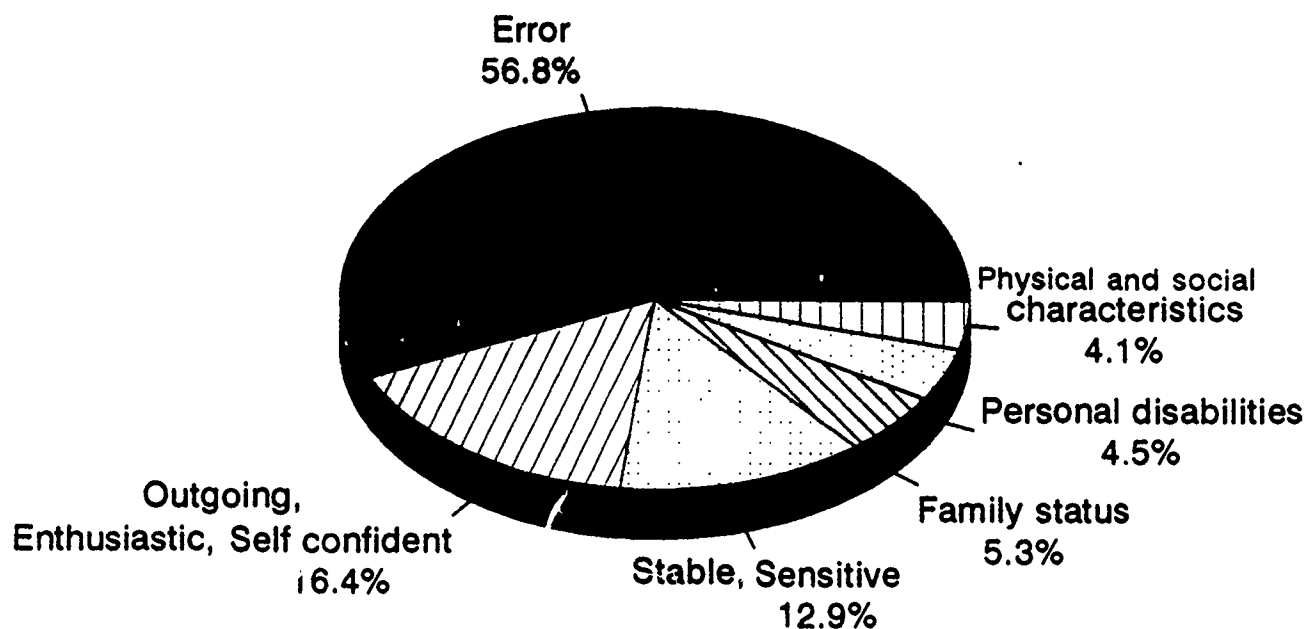
Percent of variance of "Personal Traits" explained by each factor

Figure 4. The underlying factors, as determined through rotated factor analysis, of the 46 specific traits within the "Personal Traits" area. Included are the percents of variance of the area explained by each factor.

Personal Traits
Rotated factor analysis

Correlation of trait with "outgoing, enthusiastic, self confidence" factor

Leadership 0.43
Industry 0.59
Written communication 0.61
Sense of humor 0.62
Ethical 0.63
Work with others 0.66
Confidence 0.68
Judgement/logic 0.69
Initiative 0.69
Listening skills 0.70
Dependability 0.70
Flexibility 0.70
Oral communication 0.71
Positive self concept 0.73
Enthusiasm 0.73

4.51
Grand Mean
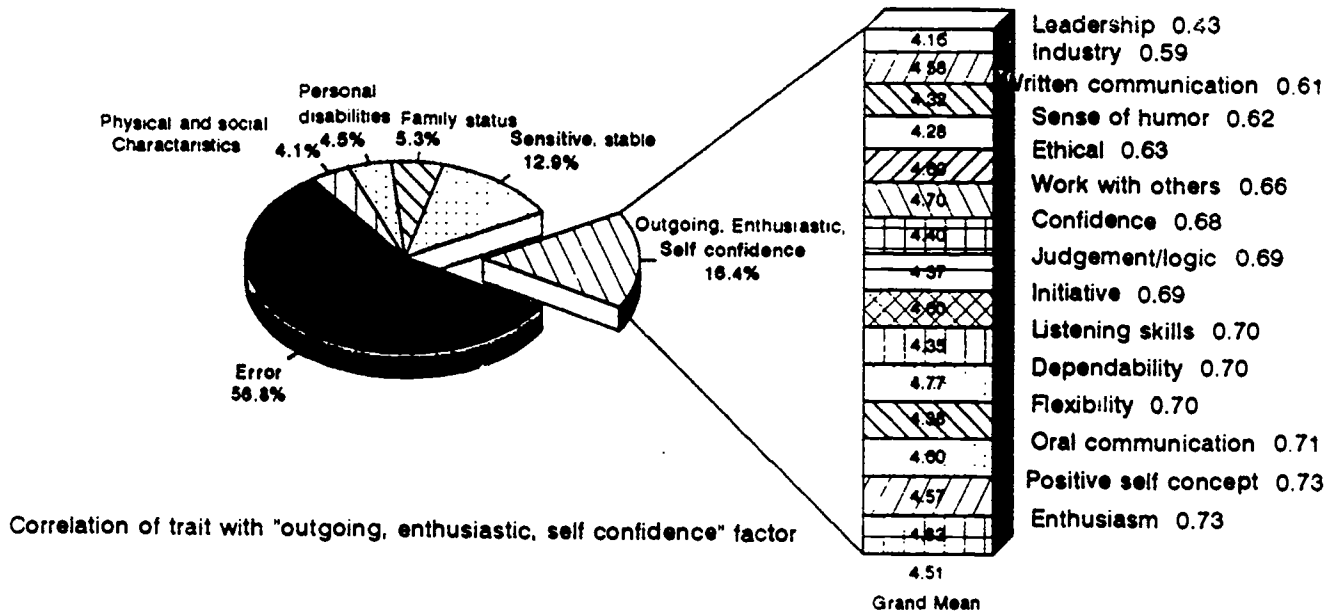
Figure 5. The specific traits which make up the "outgoing, enthusiastic, self confidence" factor of "Personal Traits". Included are the correlation figures of each trait with the factor, and the importance rating of each trait. A grand mean for the factor was also calculated.

Personal Traits
Rotated factor analysis

Maturity level 0.53

Optimism 0.56

Empathy 0.59

Sensitivity 0.60

High energy level 0.72

Emotional stability 0.73

Promptness 0.74

Tol. individ. dif. 0.76

Adaptability 0.76

Persistence 0.79

Patience 0.84

4.34

Grand Mean

Physical and social Characteristics 4.1%

Personal 4.5% disabilities

5.3% Family status

Error 56.8%

Stable, Sensitive 12.9%

Outgoing, Enthusiastic. Self confidence 16.4%

Correlation of trait with "stable, sensitive" factor

Figure 6. The specific traits which make up the "stable, sensitive" factor of "Personal Traits". Included are the correlation figures of each trait with the factor, and the importance rating of each trait. A grand mean for the factor was also calculated.

Personal Traits
Rotated factor analysis

Error 56.8%

Physical and social characteristics 4.1%

Personal 4.5% disabilities

5.3% Family status

Stable, Sensitive 12.9%

Outgoing, Enthusiastic. Self confidence 16.4%

Correlation of trait with "family status" factor

Leadership 0.43 — 4.16

Industry 0.59 — 4.58

Written communication 0.61

Bilingual capabilities 0.44 — 2.27

Age 0.53

Family background 0.54 — 2.10

Number of children 0.81 — 1.30

Marital status 0.84

2.02
Grand Mean

Figure 7. The specific traits which make up the "family status" factor of "Personal Traits". Included are the correlation figures of each trait with the factor, and the importance rating of each trait. A grand mean for the factor was also calculated.

Personal Traits
Rotated factor analysis

Correlation of trait with "personal disabilities" factor
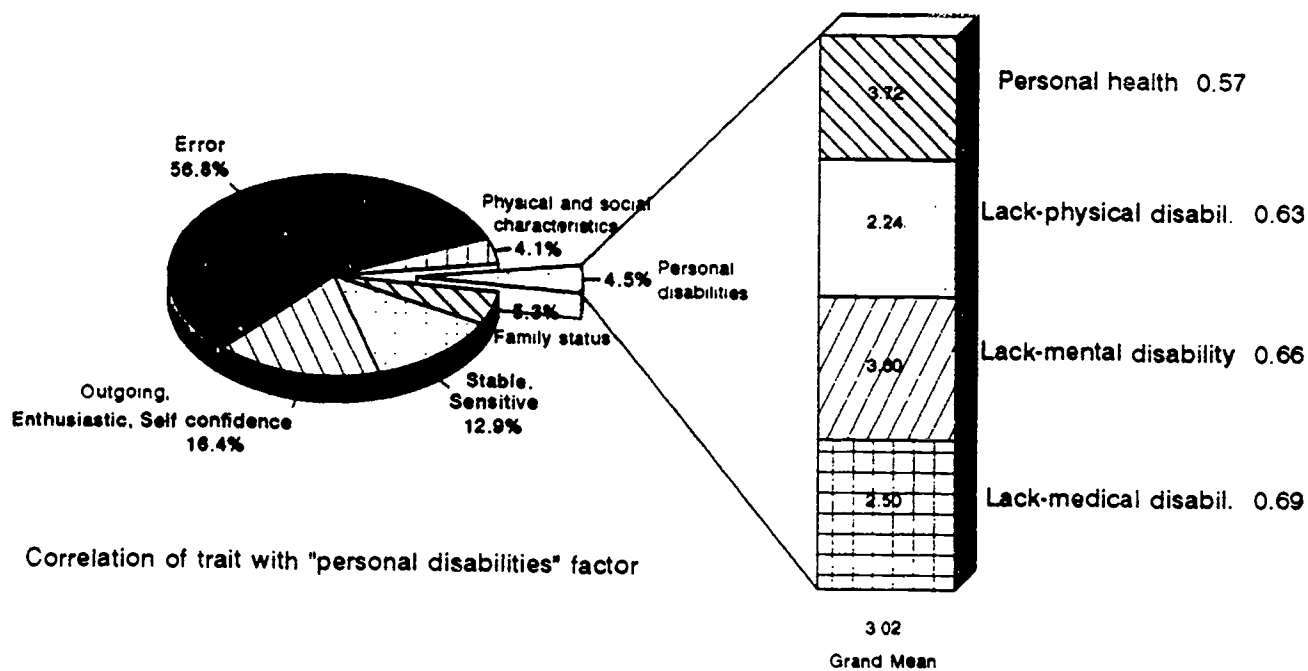
Figure 8. The specific traits which make up the "personal disabilities" factor of "Personal Traits". Included are the correlation figures of each trait with the factor, and the importance rating of each trait. A grand mean for the factor was also calculated.

Personal Traits
Rotated factor analysis

Error
56.8%

Physical and social
characteristics
4.1%

4.5%
Personal
disabilities

Outgoing,
Enthusiastic. Self confidence
16.4%

5.3%
Family status

Stable, Sensitive
12.9%

Correlation of trait with "physical and social characteristics" factor

Gender 0.60

Race 0.63

Religious affiliation 0.70

1.32
Grand Mean

Figure 9. The specific traits which make up the "physical and social characteristics" factor of "Personal Traits". Included are the correlation figures of each trait with the factor, and the importance rating of each trait. A grand mean for the factor was also calculated.

Professional Traits
importance of professional traits in hiring "first-time" teachers

Mean ▬▬▬

	0	1	2	3	4	5

Standard Deviation ▭

Criteria 0.00   .25   .50   .75   1.00   1.25

Criteria	Mean	SD
Motivates students 1	4.72	.598
Prof. integrity 2	4.68	.643
Pos emotional envir. 3	4.64	.661
Classroom discipline 4	4.59	.669
Strive for excellen. 5	4.59	.664
Lesson planning 6	4.58	.666
Interacting-parents 7	4.58	.677
Varied strategies 8	4.52	.675
Student evaluation 9	4.51	.706
Creative in class 10	4.46	.681
Content delivery 11.5	4.44	.722
Dedicated to prof 11.5	4.44	.715
Analyze learn prob 13	4.43	.726
Subject knowledge 13	4.40	.704
Confidentiality 15	4.34	.790
Problem solving 16	4.3	.706
Positive phy. envir.17	4.23	.792
Interacting-faculty 18	4.17	.663
Interacting-admin. 19	4.12	.682
Cultural sensitivity20	4.11	.858
Prof. upgrading 21	4.10	.811
Curric. development 22	3.81	.810
Personal exp-subj. 23	3.62	.782
Serve on committees 24	3.58	.877
Career objective 25	3.48	.926
Seek adv. degree 26	3.43	.880
Willing-chaperon 27	3.17	.975
Dir. extra-cur act. 28	3.13	.931
Coaching-specf spt. 29	2.77	1.011
Participate-reseach 30	2.58	1.079

N=244

Figure 10. The list of specific criteria within the "Professional Traits" area shown in priority order. Their importance is shown with the administrators' mean ratings and standard deviations.

Professional Traits
Rotated factor analysis
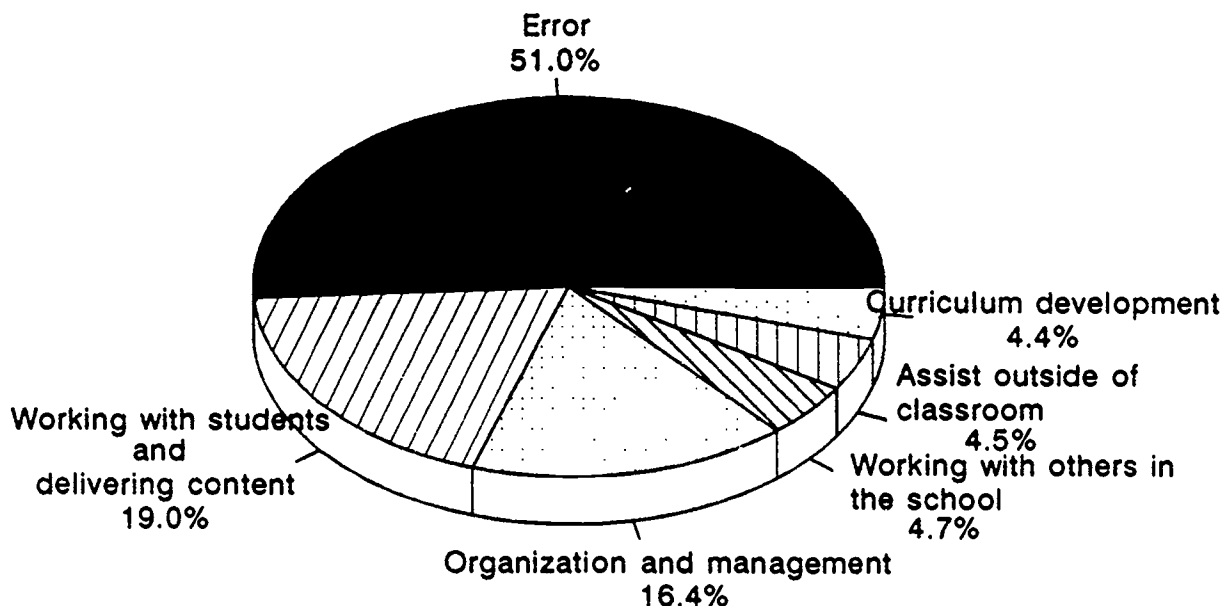
Percent of variance of "Professional Traits" explained by each factor

Figure 11. The underlying factors, as determined through rotated factor analysis, of the 30 specific traits within the "Professional Traits" area. Included are the percents of variance of the area explained by each factor.

Professional Traits
Rotated factor analysis

Personal exper-subject 0.34
Cultural sensitivity 0.51
Content delivery 0.62
Pos. physical enviorn. 0.65
Creative in classroom 0.67
Confidentiality 0.69
Dedicated to profess. 0.70
Analyze learning prob. 0.72
Motivates students 0.73
Pos. emothional envir. 0.76
Lesson planning 0.79
Student evaluation 0.79

Working with others
in the school 4.7%
Assist outside
of classroom 4.5%
Curriculum 4.4%
development

Organization and management
16.4%

Working with students
and
delivering content
19.0%

Error
51.0%

Correlation of trait with "working with students and delivering content" factor

4.38
Grand Mean

Figure 12. The specific traits which make up the "working with students and delivering content" factor of "Professional Traits". Included are the correlation figures of each trait with the factor, and the importance rating of each trait. A grand mean for the factor was also calculated.

Professional Traits
Rotated factor analysis

Correlation of trait with "organization and management" factor

Career objective 0.42
Interacting-faculty 0.49
Interacting-administra 0.52
Professional integrity 0.77
Curriculum development 0.46
Subject knowledge 0.59
Classroom discipline 0.61
Interacting-parents 0.64
Profession upgrading 0.64
Strive for excellence 0.71
Problem solving 0.73
Varied strategies 0.77

4.28
Grand Mean

Figure 13. The specific traits which make up the "organization and management" factor of "Professional Traits". Included are the correlation figures of each trait with the factor, and the importance rating of each trait. A grand mean for the factor was also calculated.

Professional Traits
Rotated factor analysis

Error
51.0%

Curriculum
development
4.4%

Assist outside
of classroom
4.5%

4.7%
Working with others
in the school

16.4%
Organization and
management

19.0%
Working with
students and
delivering content

Correlation of trait with "working with others in the school" factor

4.58 — Skill at interacting with parents 0.44

4.72 — Skill at interacting with administration 0.72

4.17 — Skill at interacting with faculty 0.72

4.29
Grand Mean

Figure 14. The specific traits which make up the "working with others in the school" factor of "Professional Traits". Included are the correlation figures of each trait with the factor, and the importance rating of each trait. A grand mean for the factor was also calculated.

Professional Traits
Rotated factor analysis

Error
51.0%

Curriculum
development
4.4%

Assist outside
of classroom
4.5%

4.7%
Working with others
in the school

19.0%
Working with
students and
delivering content

16.4%
Organization and
management

Correlation of trait with "assist outside of classroom" factor

Have a stated career
objective   0.36

Willingness to serve on
committees   0.40

3.58

Interest in coaching a
specific sport   0.61

2.77

Willingness to
chaperon events   0.62

3.17

3.25
Grand Mean

Figure 15. The specific traits which make up the "assist outside of classroom" factor of "Professional Traits". Included are the correlation figures of each trait with the factor, and the importance rating of each trait. A grand mean for the factor was also calculated.

Professional Traits
Rotated factor analysis

Error
51.0%

Curriculum
development
4.4%

Assist outside of classroom

4.7%
Working with others
16.4% in the school
Organization and
management

19.0%
Working with
students and
delivering content

Correlation of trait with "curriculum development" factor

Professional upgrading/
workshops/reading   0.29

Have a stated career
objective   0.30

Curriculum development
0.38

Willingness to serve on
committees   0.56

Willingness to participate in
research activities   0.62

4.10
3.48
3.81
3.58
2.58

3.51
Grand Mean

Figure 16. The specific traits which make up the "curriculum development" factor of "Professional Traits". Included are the correlation figures of each trait with the factor, and the importance rating of each trait. A grand mean for the factor was also calculated.
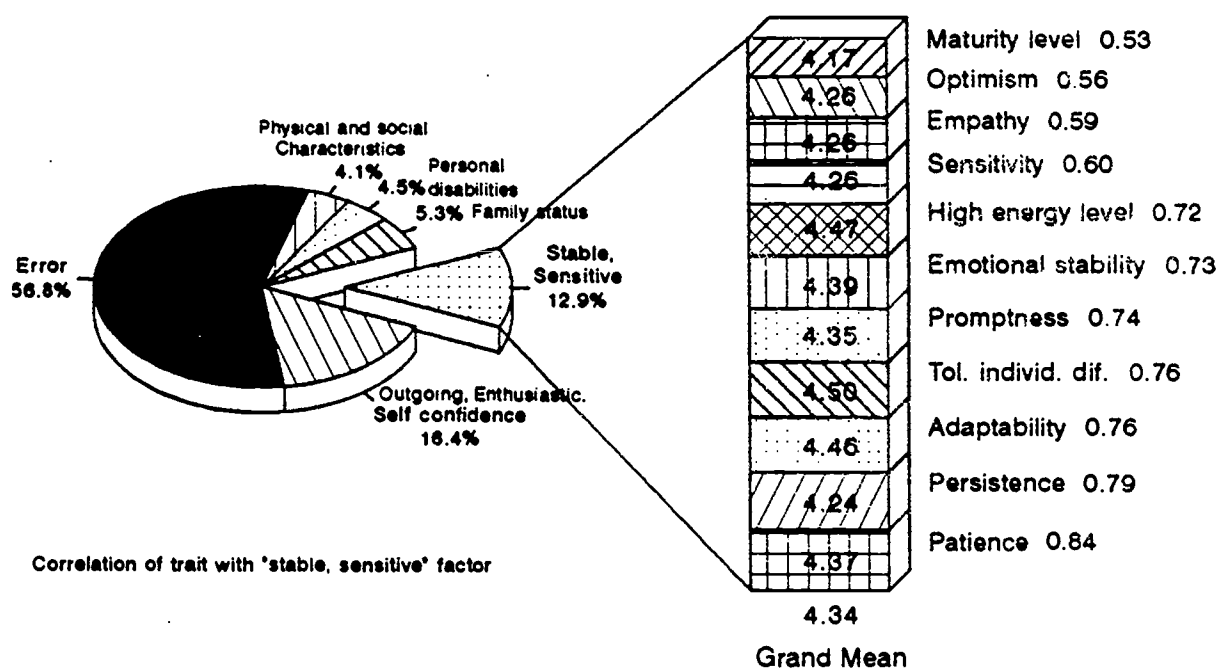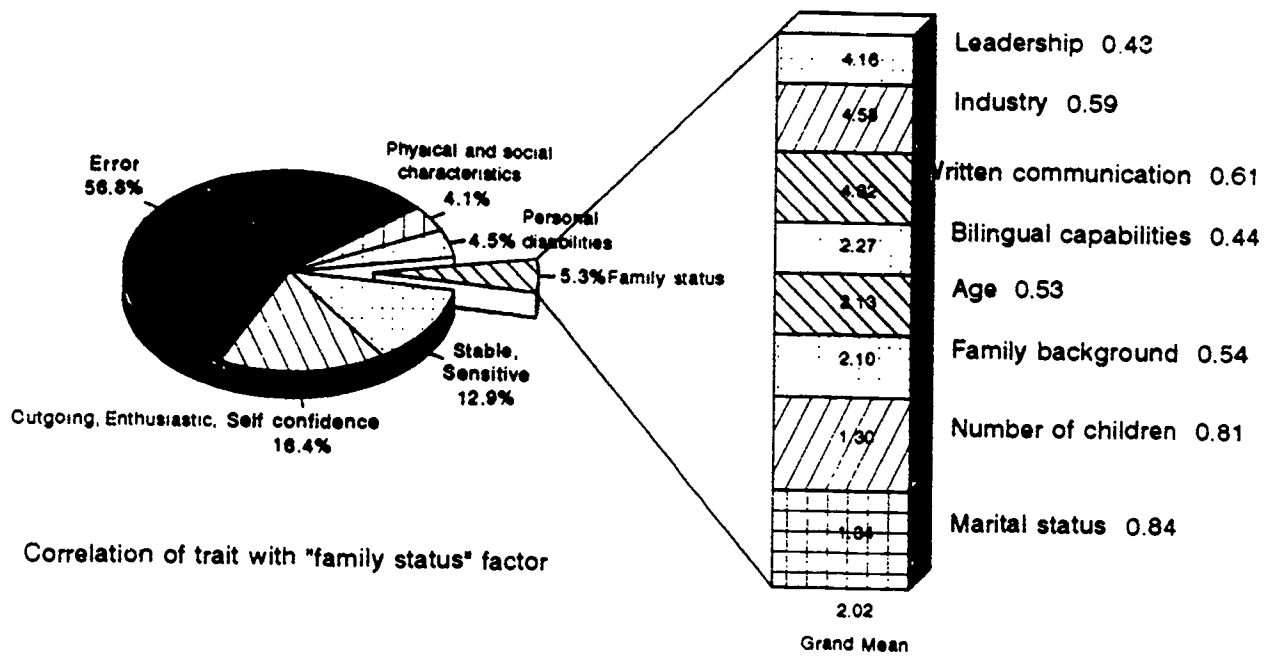
Academic Preparation
importance of the academic preparation criteria

Mean ▅▅▅▅▅

| | 0 | 1 | 2 | 3 | 4 | 5 |

Standard Deviation ▭▭▭▭

| Criteria | 0.00 | .25 | .50 | .75 | 1.00 | 1.25 |

Criteria	Mean	Standard Deviation
Subject knowledge 1	4.60	.649
Student teaching GPA 2	4.22	.854
Major GPA 3	4.03	.678
GPA in subject area 4	3.92	.733
Instructional tech. 5	3.74	.801
Sp. courses taken 6	3.62	.813
Overall GPA 7	3.57	.840
Computer skills 8	3.49	.826
Education class GPA 9	3.41	.746
Extracurric. prep 10	3.40	.805
Multicultural aware 11	3.35	1.057
Diversity of STeach 12	3.28	.986
Spec. coaching prep 13	2.98	.902
Pass basic skill ts 14	2.95	1.185
Length of STeach 15	2.86	1.058
Eng. as second lang 16	2.21	.961
1 year foreign lang 17	2.11	.882
Grant writing skill 18	2.02	.899
Conduct research 19	2.01	.903

N=246

Figure 17. The list of specific criteria within the "Academic Preparation" area shown in priority order. Their importance is shown with the administrators' mean ratings and standard deviations.

Academic Preparation
Rotated factor analysis
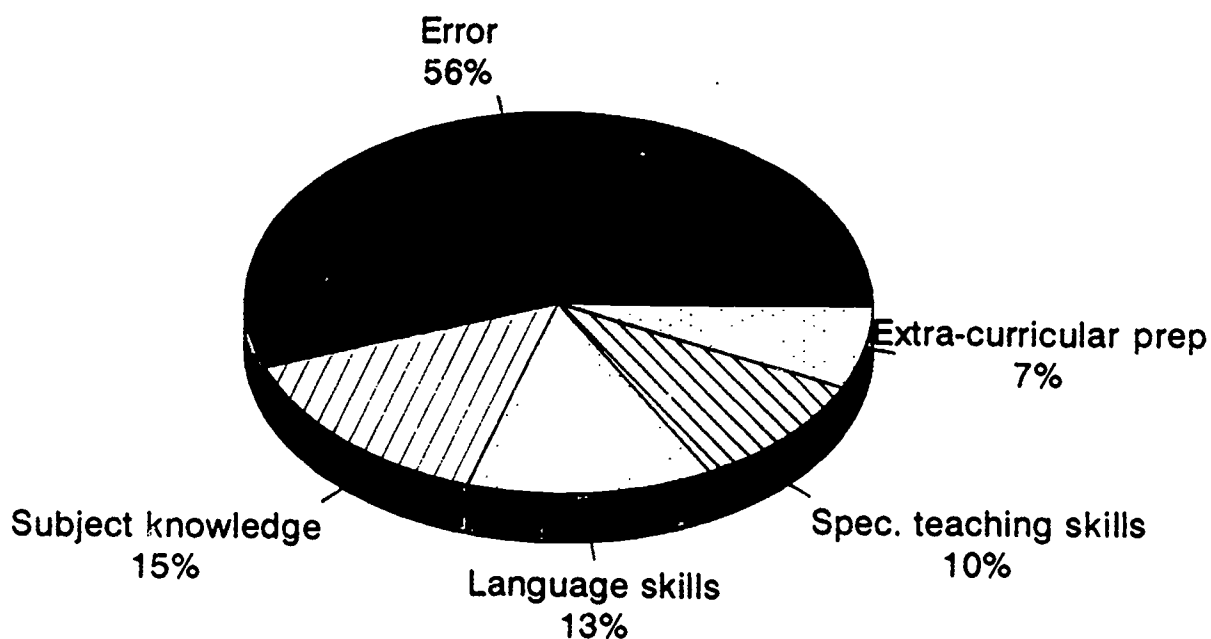
Percent of variance of "Academic Preparation" explained by each factor

Figure 18. The underlying factors, as determined through rotated factor analysis, of the 19 specific traits within the "Academic Preparation" area. Included are the percents of variance of the area explained by each factor.

Academic Preparation
Rotated factor analysis

Extra-curricular prep 7%
Spec. teaching skills 10%
Language skills 13%
Subject knowledge 15%
Error 56%

3.41	Education class GPA 0.52
4.60	Subject knowledge 0.55
4.22	Student teaching GPA 0.55
3.57	Overall GPA 0.64
4.06	Major GPA 0.78
3.92	GPA in subject area 0.81

3.96
Grand Mean

Correlation of trait with "subject matter" factor
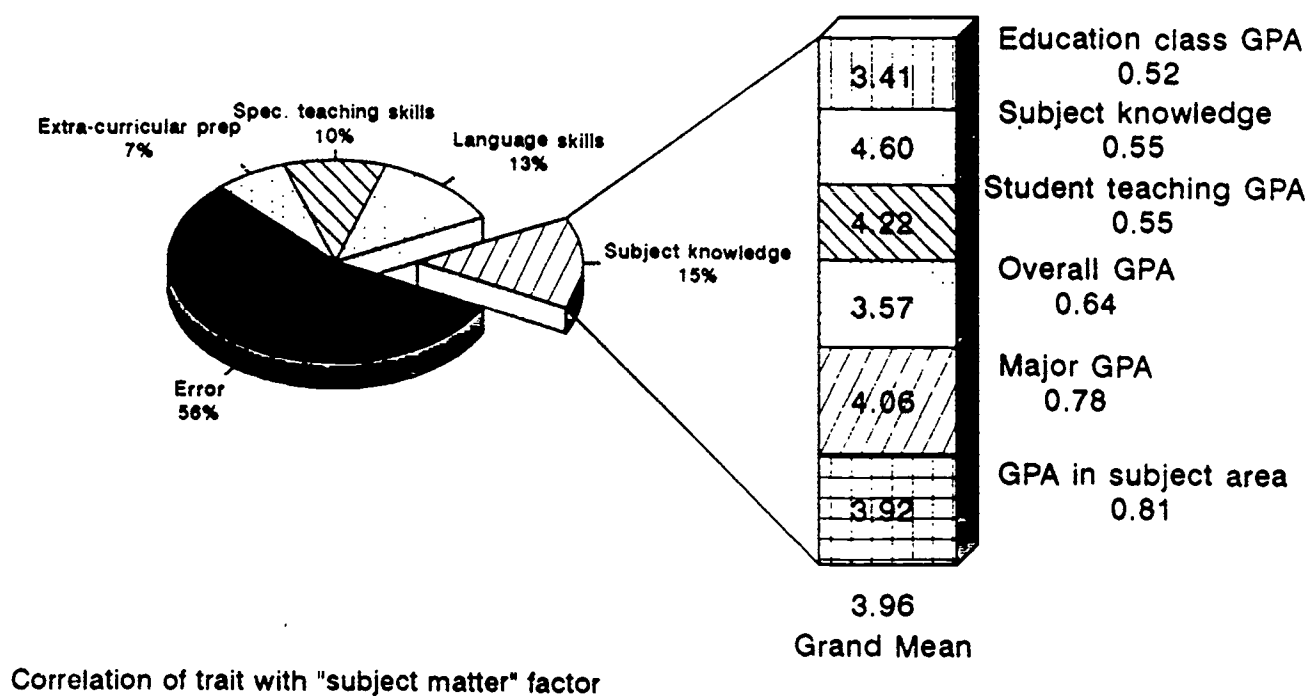
Figure 19. The specific traits which make up the "subject knowledge" factor of "Academic Preparation". Included are the correlation figures of each trait with the factor, and the importance rating of each trait. A grand mean for the factor was also calculated.
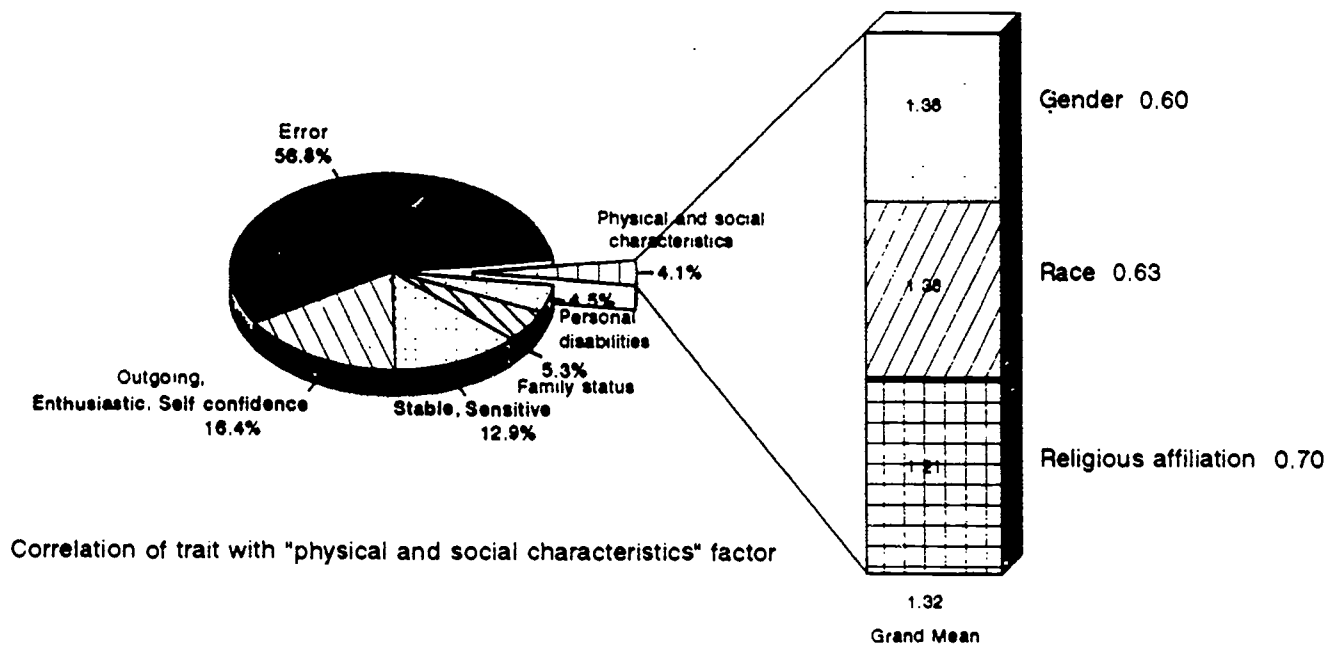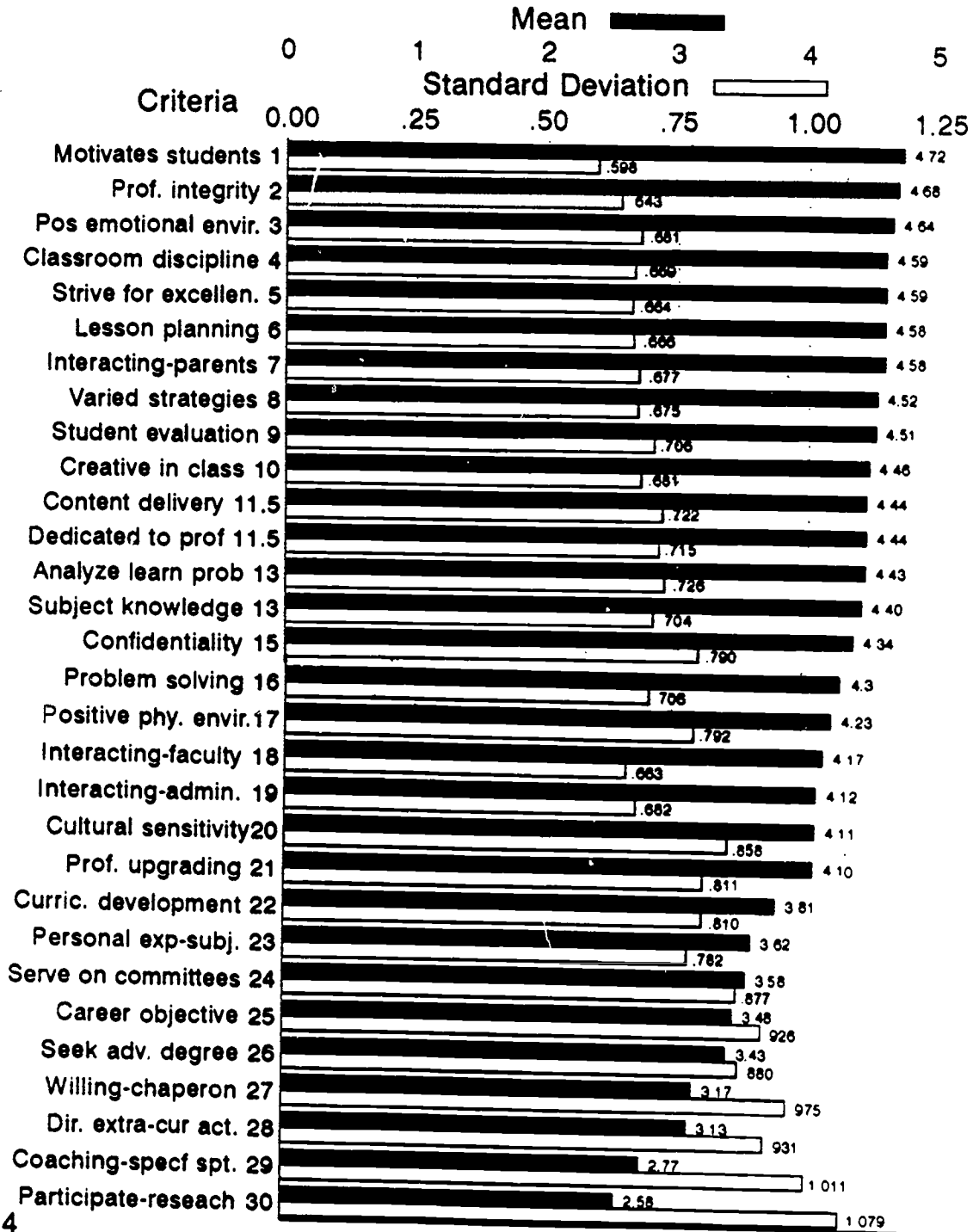
Academic Preparation
Rotated factor analysis
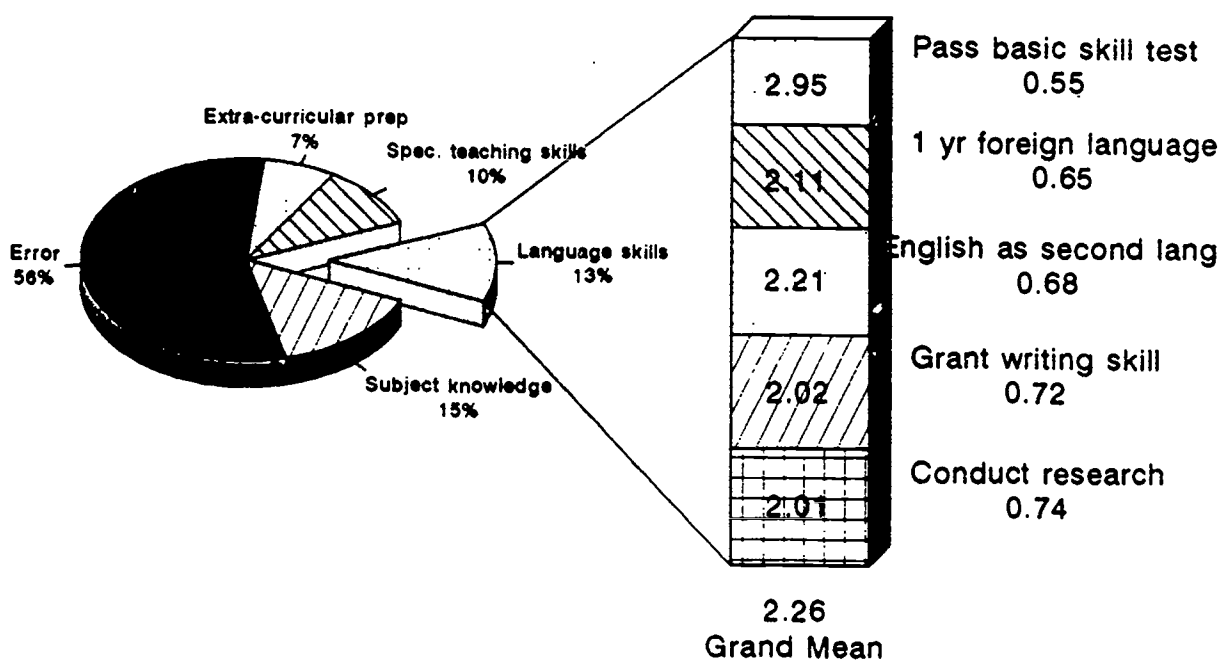
Correlation of trait with "language skills" factor

2.95	Pass basic skill test 0.55
2.11	1 yr foreign language 0.65
2.21	English as second lang 0.68
2.02	Grant writing skill 0.72
2.01	Conduct research 0.74

2.26
Grand Mean

Extra-curricular prep 7%
Spec. teaching skills 10%
Language skills 13%
Error 56%
Subject knowledge 15%

Figure 20. The specific traits which make up the "language skills" factor of "Academic Preparation". Included are the correlation figures of each trait with the factor, and the importance rating of each trait. A grand mean for the factor was also calculated.

Academic Preparation
Rotated factor analysis

Specific courses taken
0.38
Computer skills
0.42
Multicultural aware
0.48
Instructional tech.
0.49
Diversity of STeach
0.60
Length-Student Teach
0.65

Error 56%

Extra-curricular prep 7%

Spec. teaching skills 10%

Language skills 13%

Subject knowledge 15%

3.62
3.49
3.35
3.74
3.28
2.86

3.39
Grand Mean

Correlation of trait with "specific teaching skills" factor

Figure 21. The specific traits which make up the "specific teaching skills" factor of "Academic Preparation". Included are the correlation figures of each trait with the factor, and the importance rating of each trait. A grand mean for the factor was also calculated.

Academic Preparation
Rotated factor analysis
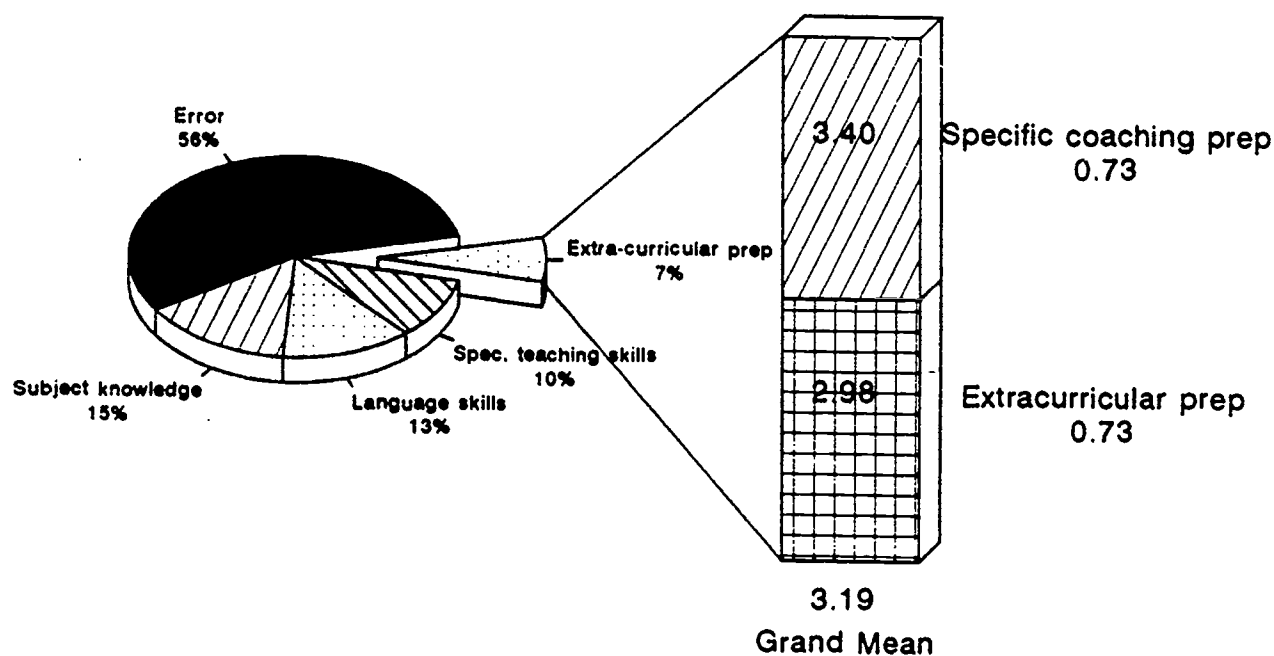
Correlation of trait with "extra curricular preparation" factor

Figure 22. The specific traits which make up the "extra-curricular preparation" factor of "Academic Preparation". Included are the correlation figures of each trait with the factor, and the importance rating of each trait. A grand mean for the factor was also calculated.
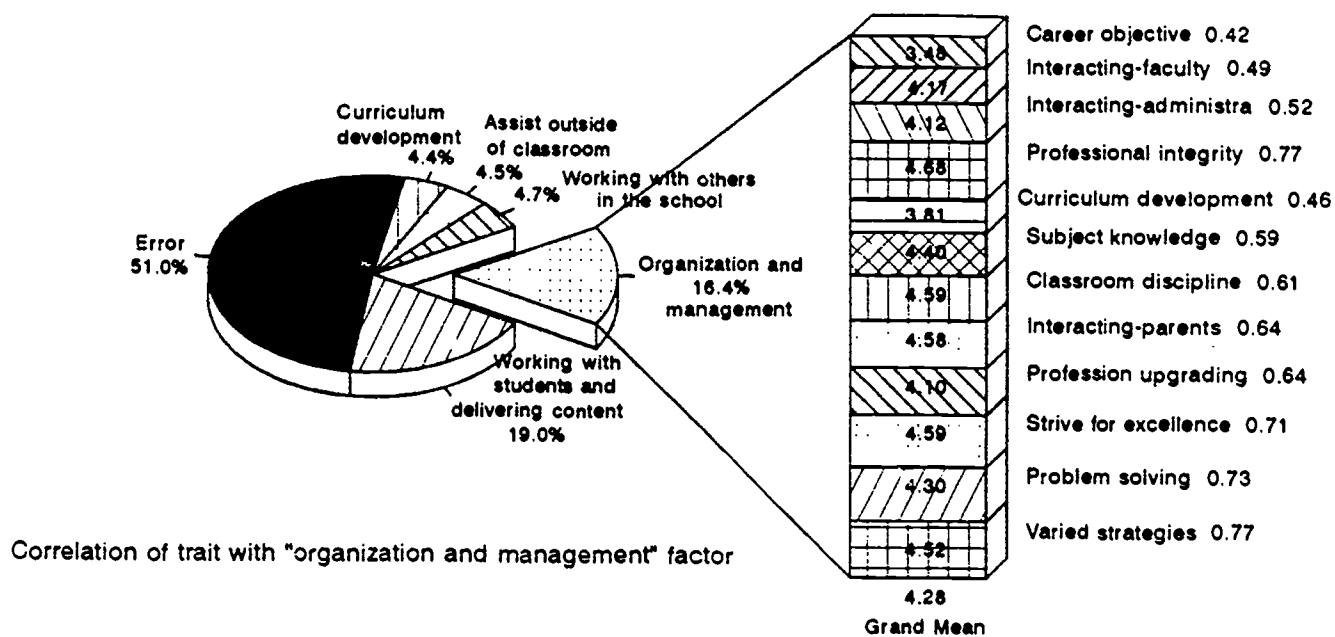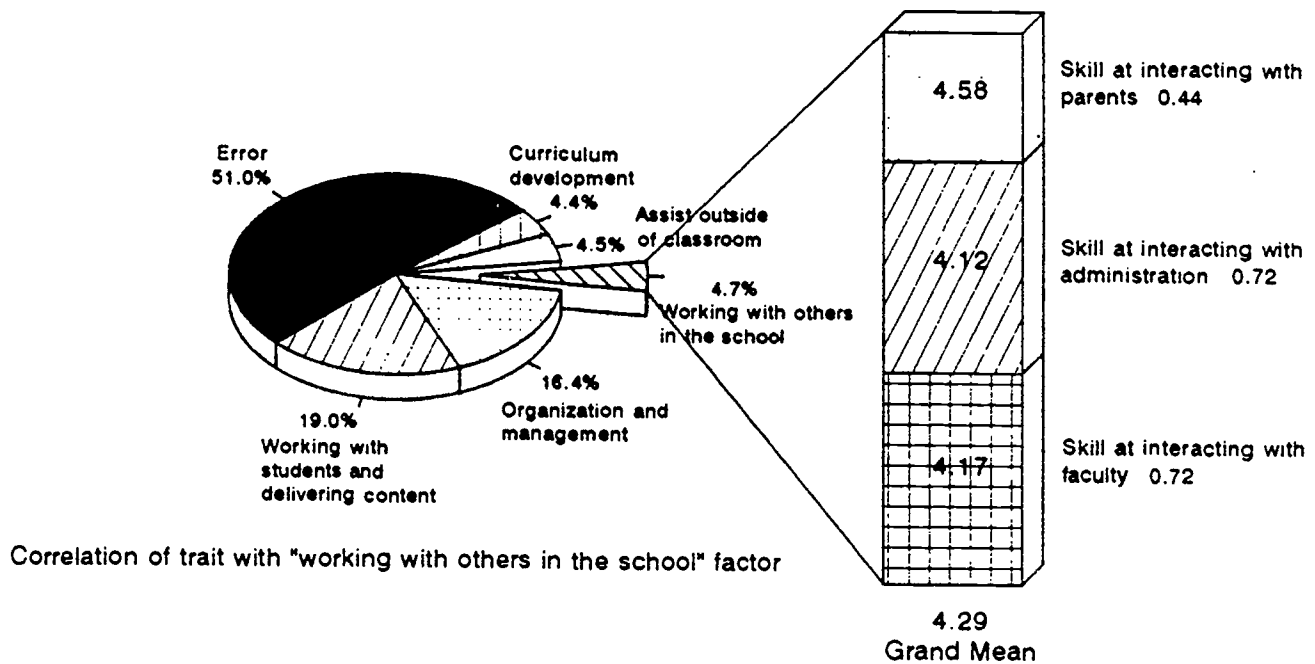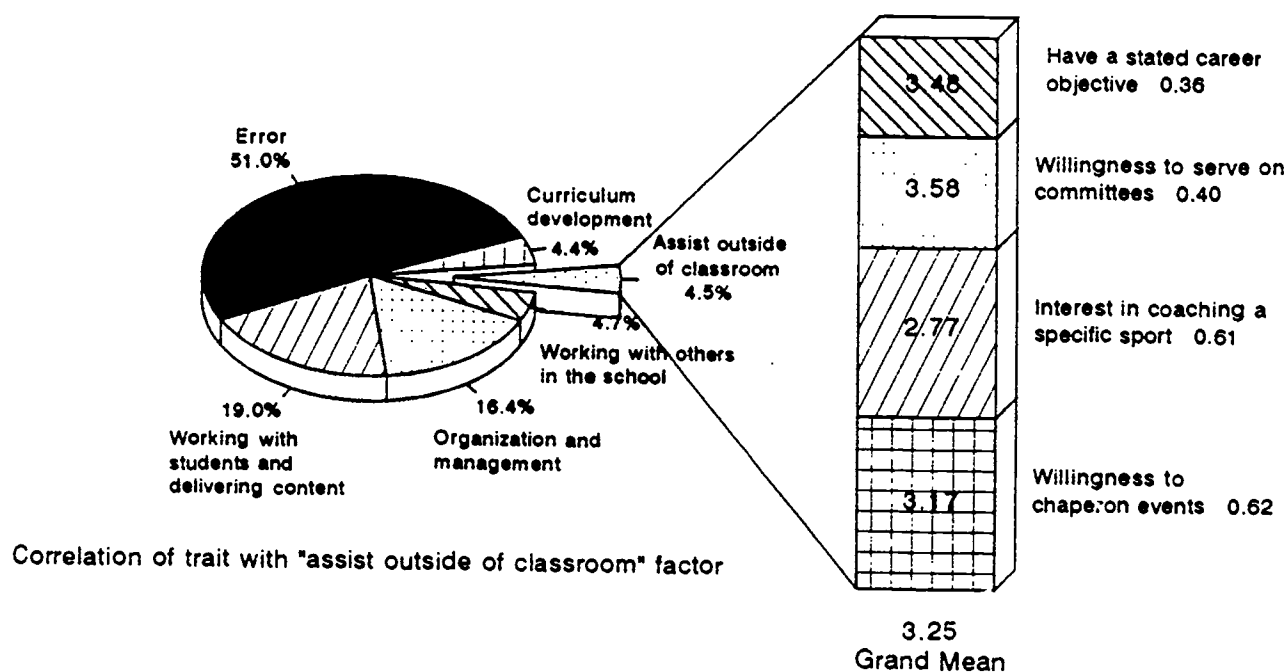
Professionally Related Experience
importance of professionally related experience when hiring "first-time" teachers

Mean ▬▬▬

Standard Deviation ▭

	0	1	2	3	4	5
	0.00	.25	.50	.75	1.00	1.25

Rank	Criteria	Mean	SD
1	Work with school age children	3.96	.860
2	Involvement as a student in service organizations	3.27	.909
3	Involvement in community youth clubs (as a leader)	3.25	.964
4	Involvement in a student professional education organization	3.22	.870
5	Involvement as a student in clubs (within major)	3.18	.851
6	Involvement as a student in professional education organization	3.16	.835
7	Membership in professional education organizations	3.09	.962
8	Awards/scholarships	3.03	.822
9	Experience sponsoring specific extra-curricular activities	2.99	.996
10	Coaching experience	2.91	.998
11	Involvement as a student in a honorary or professional fraternity	2.85	.919
12	Involvement as a student in clubs (outside major)	2.79	.856
13	Involvement as a student in University government	2.72	.926
14	Travel	2.65	.936
15	Involvement in charity organizations	2.64	.948
16	Involvement as a student in inter-collegiate athletics	2.54	.913
17	Independent living	2.52	1.034
18	Involvement as a student in music	2.48	.917
19	Involvement as a student in intramural sports	2.44	.939
20	Involvement in church	2.42	1.054
21	Involvement as a student in drama	2.42	.983
22	Involvement in political organizations	2.16	.964
23	Involvement as a student in social fraternity/sorority	2.05	.937
24	Involvement as a student in dorm/Greek government	2.02	.961

N=243

Figure 23. The list of specific criteria within the "Professionally Related Experience" area shown in priority order. Their importance is shown with the administrators' mean ratings and standard deviations.

Professionally Related Experience
Rotated factor analysis

59.1%
Error

Involvement with
school clubs
7.7%

Outside/community
involvement
especially with
children
10.9%

Involvement in professional
education organizations
11.3%

Personal growth &
leadership
11.0%

Percent of variance of "Professionally Related Experience" explained by each factor

Figure 24. The underlying factors, as determined through rotated factor analysis, of the 24 specific traits within the "Professionally Related Experience" area. Included are the percents of variance of the area explained by each factor.

Professionally Related Experience
Rotated factor analysis
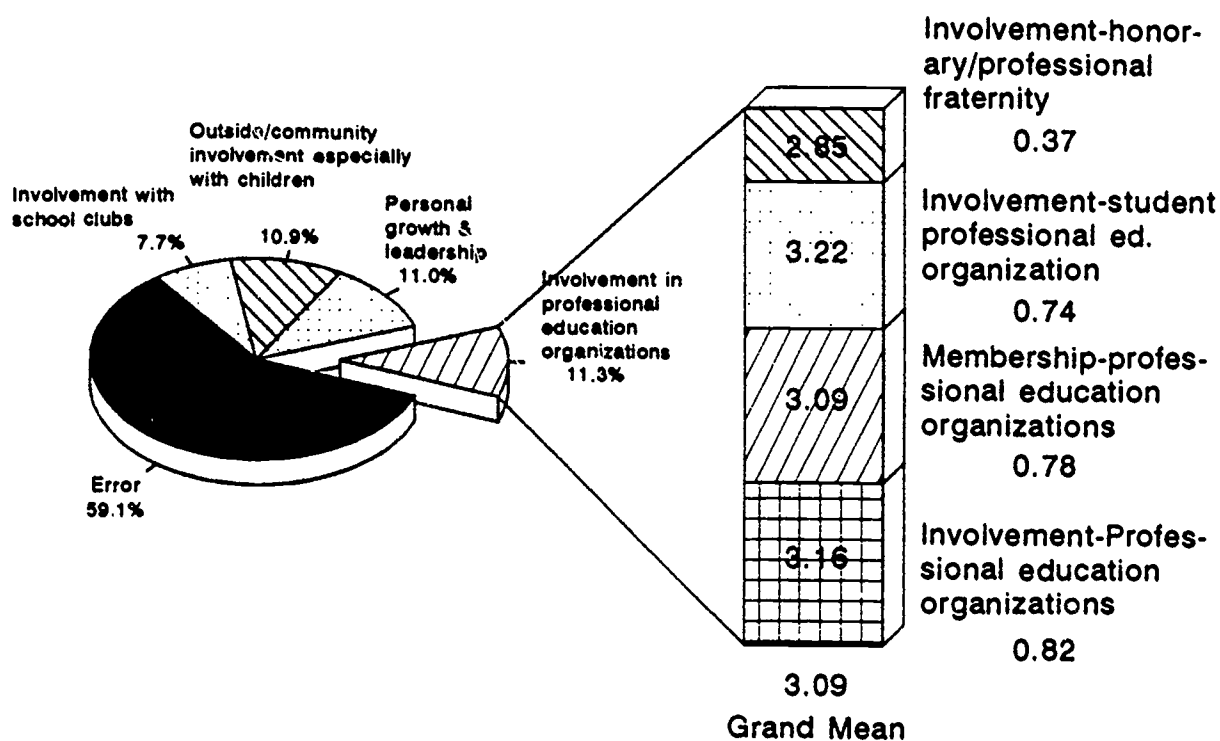
Correlation of trait with "involvement in professional education organizations" factor

Figure 25. The specific traits which make up the "involvement in professional education organizations" factor of "Professionally Related Experience". Included are the correlation figures of each trait with the factor, and the importance rating of each trait. A grand mean for the factor was also calculated.
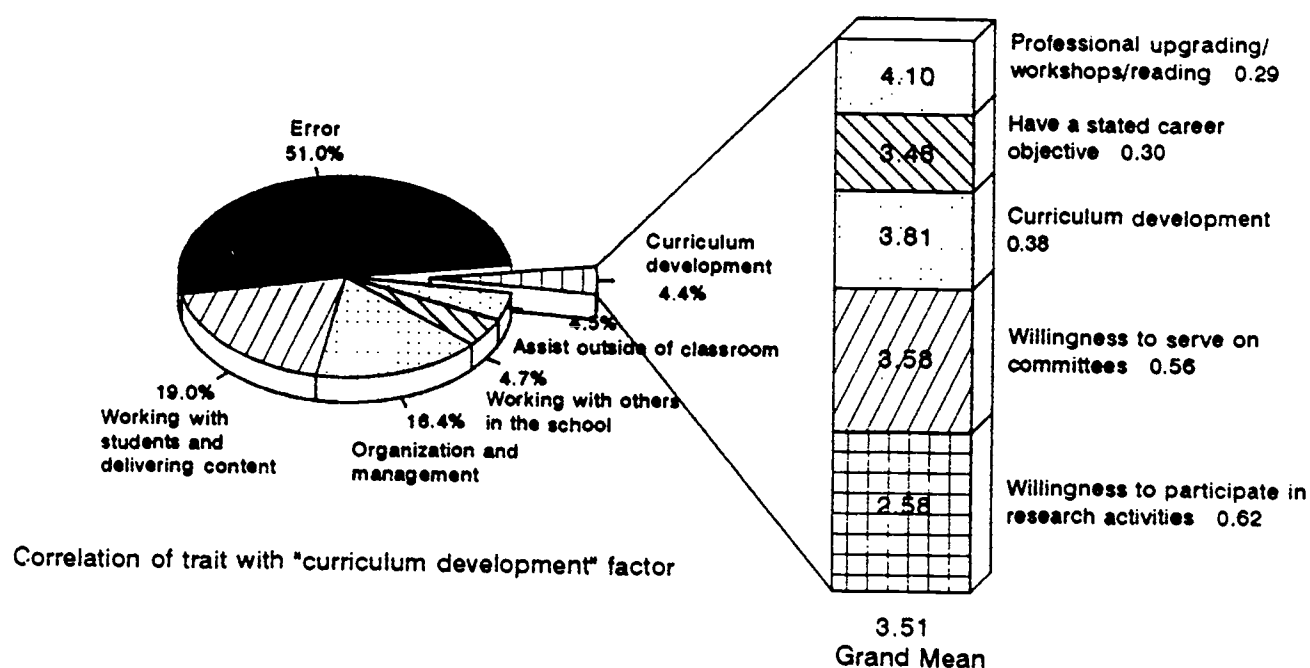
Professionally Related Experience
Rotated factor analysis

Involvement with school clubs 7.7%

Outside/community involvement especially with children 10.9%

Error 59.1%

Personal growth & leadership 11.0%

Involvement in professional education organizations 11.3%

Involvement-political organizations 0.43 — 2.16

Involvement-music 0.48 — 2.48

Involvement-drama 0.55 — 2.42

Membership-social fraternity/sorority 0.78 — 2.05

Involvement-dormitory/Greek system government 0.79 — 2.02

2.23
Grand Mean
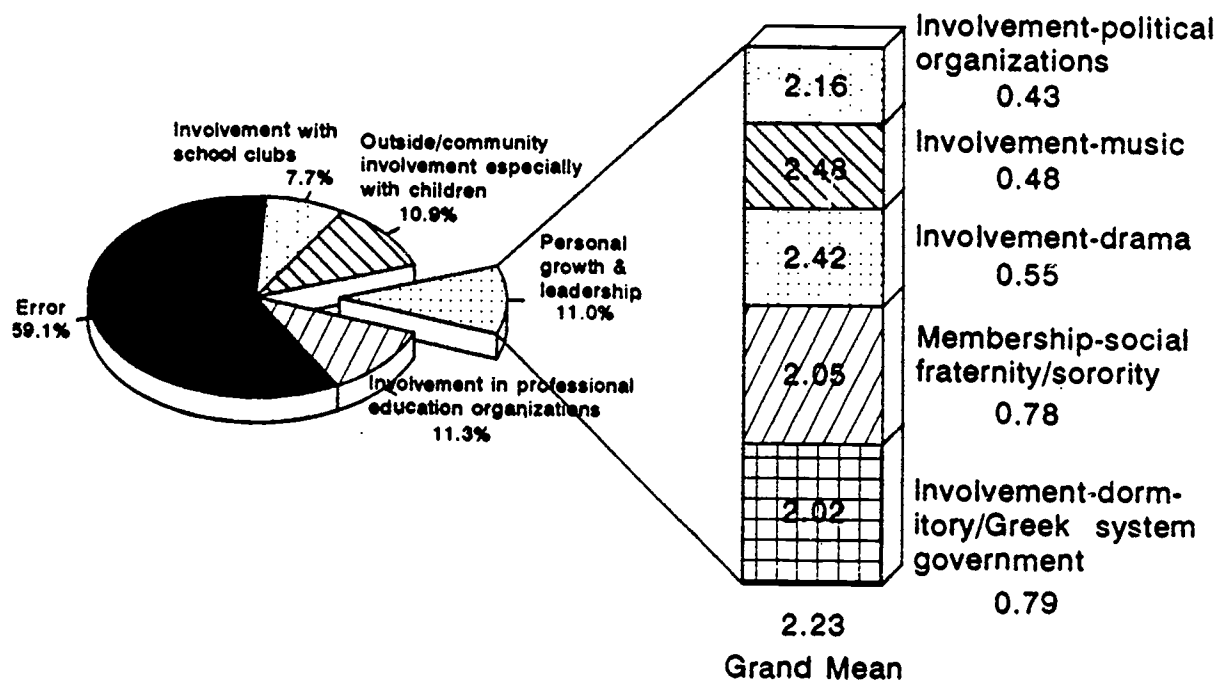
Correlation of trait with "personal growth & leadership" factor

Figure 26. The specific traits which make up the "personal growth and leadership" factor of "Professionally Related Experience". Included are the correlation figures of each trait with the factor, and the importance rating of each trait. A grand mean for the factor was also calculated.

Professionally Related Experience
Rotated factor analysis

Involvement with
school clubs
7.7%

Error
59.1%

Outside/community
involvement especially
with children
10.9%

11.0%
Personal
growth &
leadership

11.3%
Involvement in professional
education organizations

	Work-school age children 0.33
3.96	Travel 0.35
2.65	Involvement-drama 0.36
2.42	Service organizations 0.42
3.27	Political organizations 0.42
2.16	Involvement-music 0.45
2.48	Involvement-University government 0.49
2.72	Involvement-youth clubs as leader 0.57
3.25	Independent living 0.59
2.52	
2.64	Involvement-charity 0.65

2.81
Grand Mean
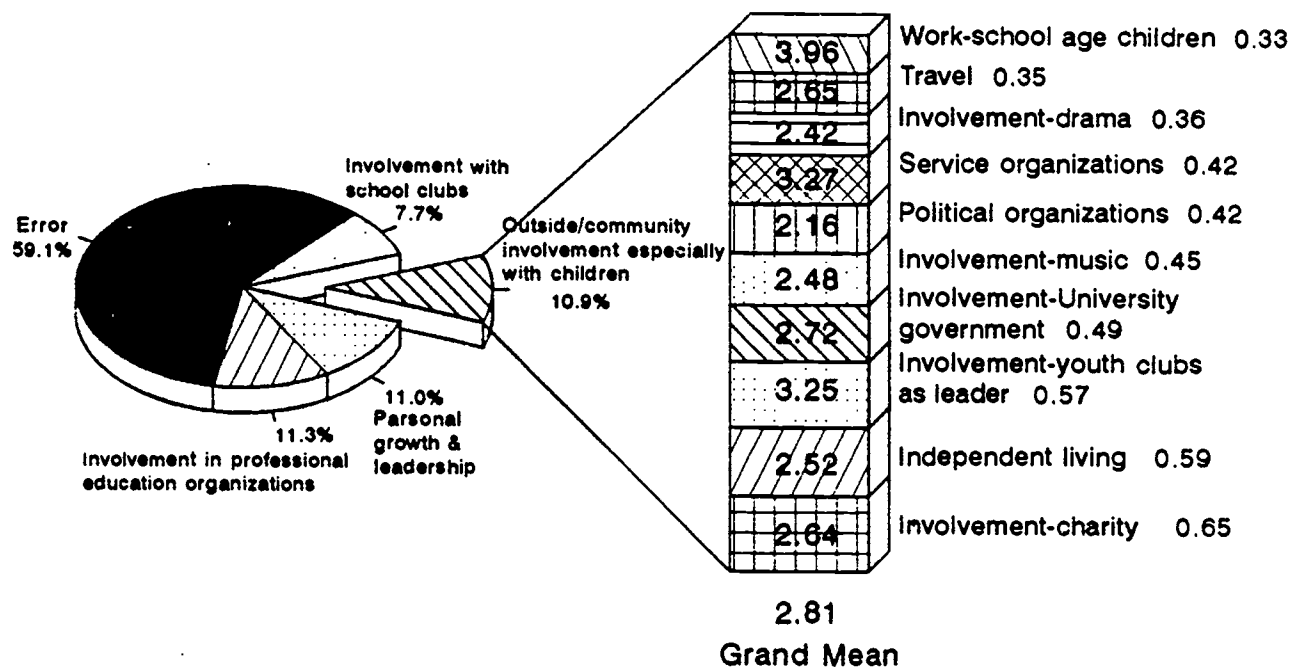
Correlation of trait with "outside/community involvment especially with children" factor

Figure 27. The specific traits which make up the "outside/community involvement especially with children" factor of "Professionally Related Experience". Included are the correlation figures of each trait with the factor, and the importance rating of each trait. A grand mean for the factor was also calculated.
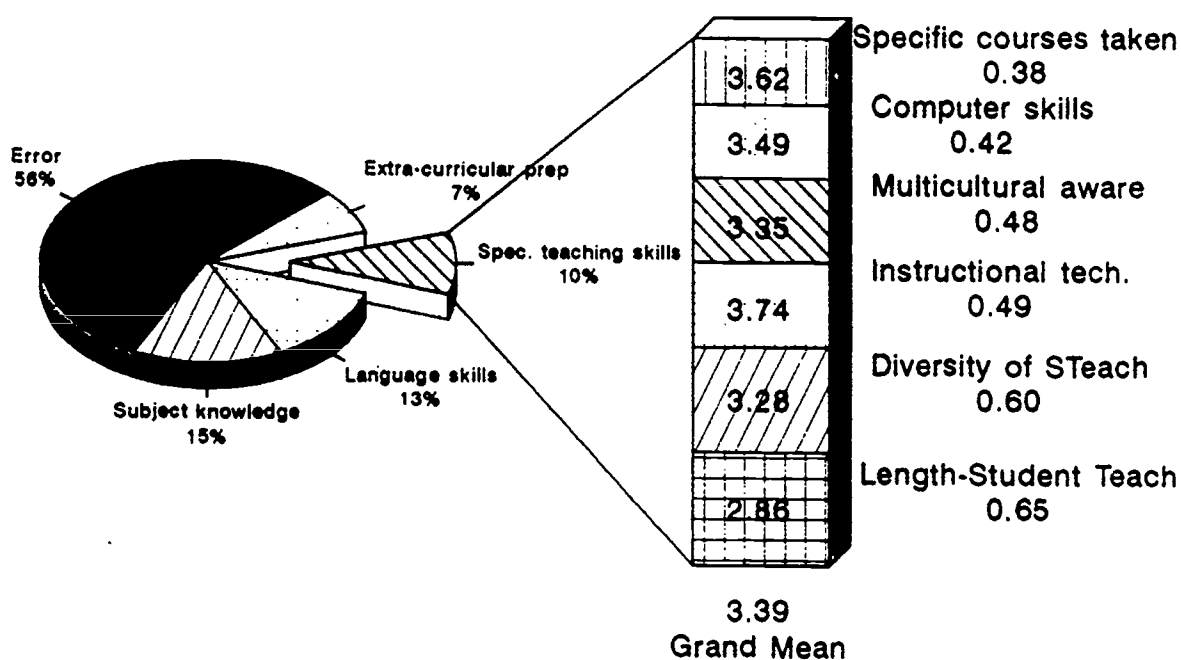
Professionally Related Experience
Rotated factor analysis

Error
59.1%

Involvement with
school clubs
7.7%

11.3%
Involvement in
professional education
organizations

11.0%
Personal
growth &
leadership

10.9%
Outside/community
involvement especially
with children

2.42 Involvement in church   0.39

2.79 Involvement as a student in
clubs (outside major)   0.52

3.27 Involvement as a student in
service organizations   0.53

3.18 Involvement as a student in
clubs (within major)   0.57

2.92
Grand Mean

Correlation of trait with "involvement with school clubs" factor
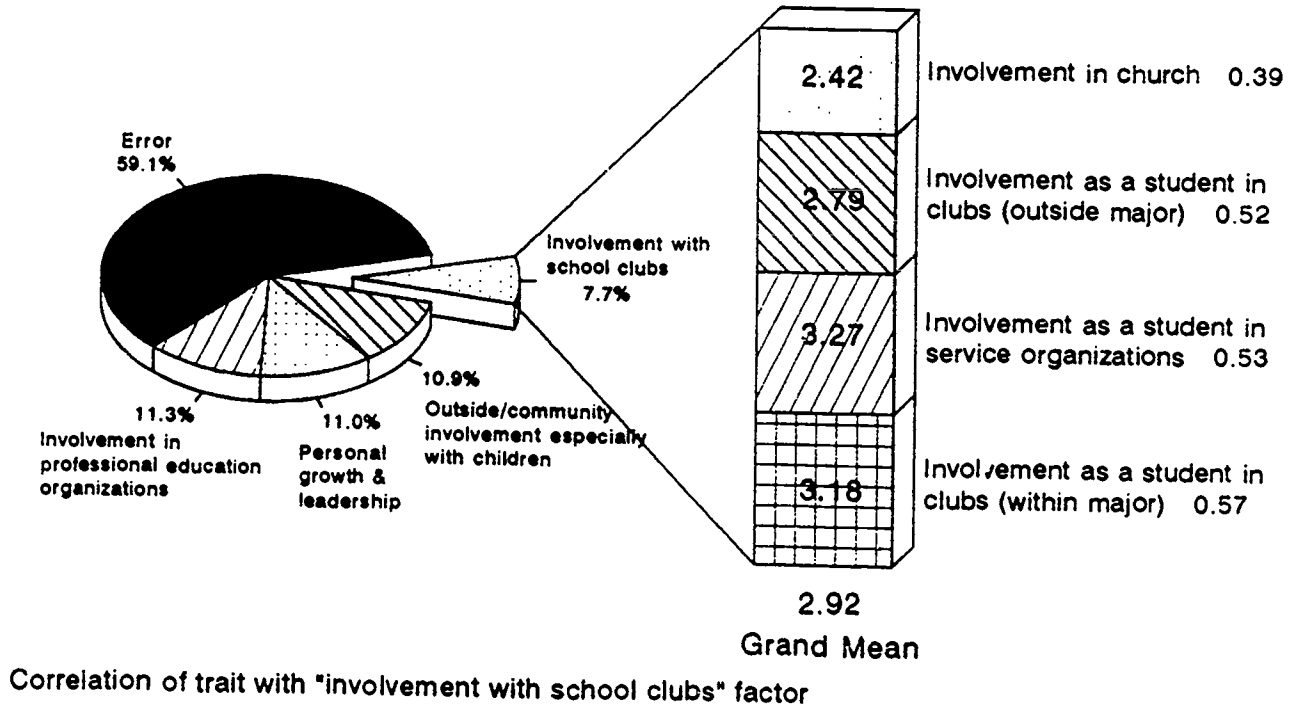
Figure 28. The specific traits which make up the "involvement with school clubs" factor of "Professionally Related Experience". Included are the correlation figures of each trait with the factor, and the importance rating of each trait. A grand mean for the factor was also calculated.

Work Experience/Paid Employment
importance of work experience or paid employment when hiring "first-time" teachers

Mean �

		0	1	2	3	4	5
Rank	Criteria	0.00	Standard Deviation ▭ .25	.50	.75	1.00	1.25

Rank / Criteria:

1 Absenteeism — 4.76

2 Quality of work performed — 4.73, .561

3 Punctuality — 4.61, .621

4 Interpersonal relationship with peers — 4.46, .666

5 Able to follow directions — 4.43, .704

6 Interpersonal relationship with supervisors — 4.42, .689

7 Not having been discharged from a position — 4.30, .690

8 People related work experience — 4.26, .682

9 Responsibilities held — 4.16, .795

10 Work experience with children — 4.15, .745

11 Quantity of work performed — 3.99, .854

12 Work related to subject taught — 3.51, .909

13 Length of employment — 3.36, .958

14 Size of employing agency — 2.50, .958
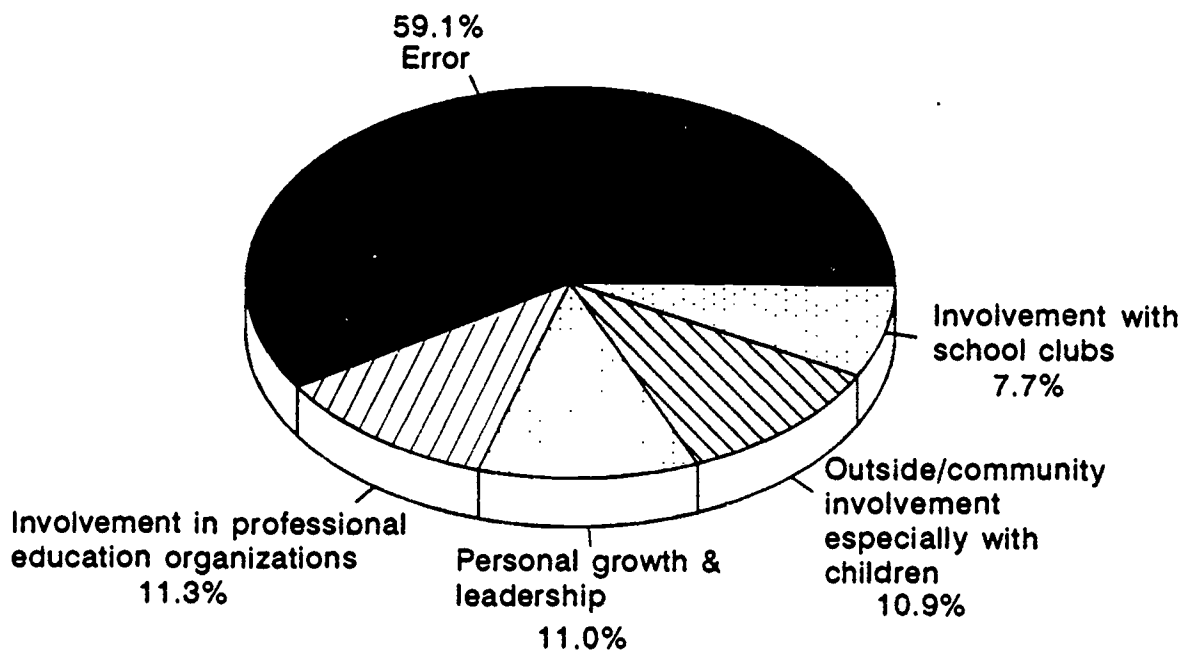
15 Geographic location of employment — 2.32, 1.017 / 1 075

N=244

Figure 29. The list of specific criteria within the "Work Experience/Paid Employment" area shown in priority order. Their importance is shown with the administrators' mean ratings and standard deviations.

Work Experience/Paid Employment
Rotated factor analysis

48.4%
Error

Positive work ethic
21.6%

Demographic
information about
employer
9.5%

Interpersonal skills
with others
20.5%
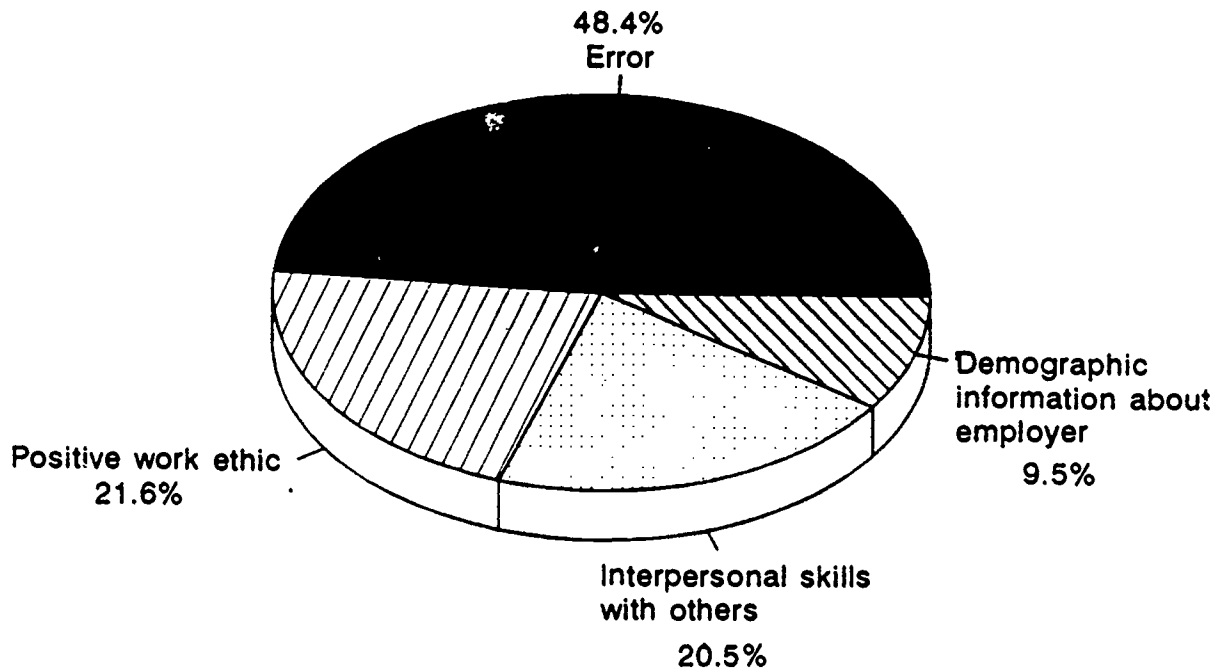
Percent of variance of "Work Experience/Paid Employment" explained by each factor

Figure 30. The underlying factors, as determined through rotated factor analysis, of the 15
specific traits within the "Work Experience/Paid Employment" area. Included are the
percents of variance of the area explained by each factor.

Work Experience/Paid Employment
Rotated factor analysis

Correlation of trait with "positive work ethic" factor

Demographic information about employer 9.5%

Interpersonal skills with others 20.5%

Positive work ethic 21.6%

Error 48.4%

Quantity of work perf. 0.43 — 3.99

Not been discharged 0.56 — 4.30

Quality of work perf. 0.70 — 4.73

Able to follow direct. 0.71 — 4.43

Absenteeism 0.74 — 4.76

Punctuality 0.78 — 4.51
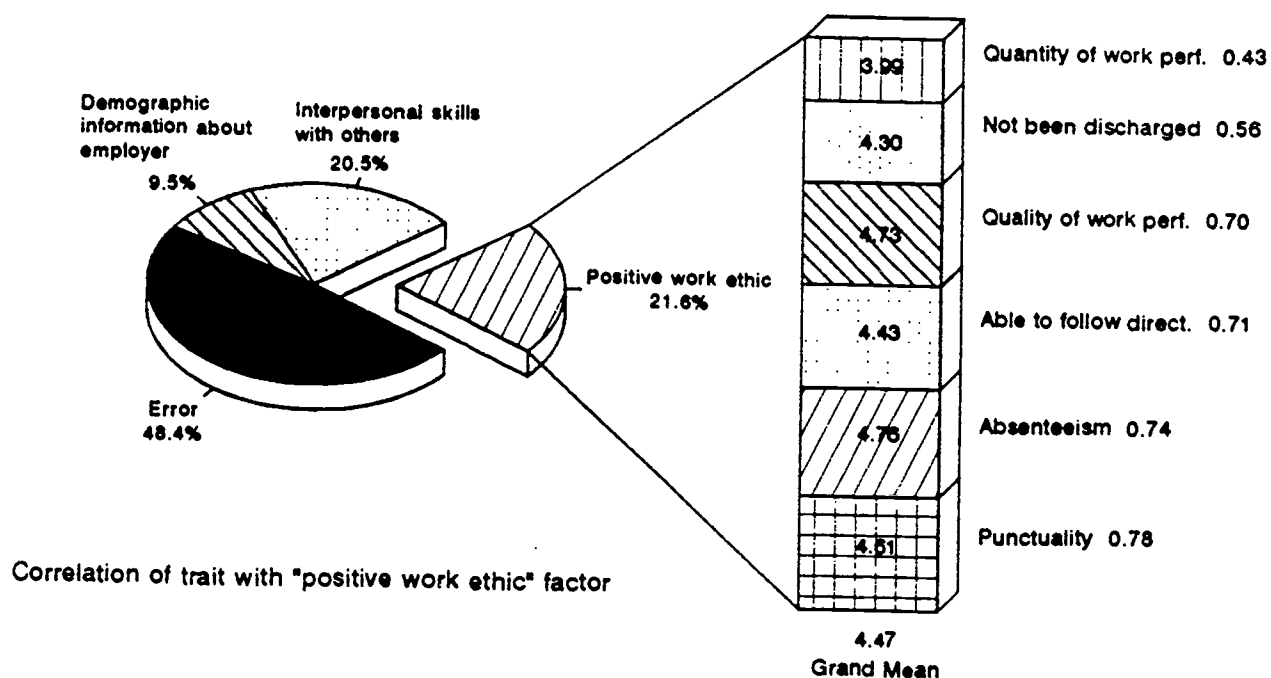
4.47 Grand Mean

Figure 31. The specific traits which make up the "positive work ethic" factor of "Work Experience/Paid Employment". Included are the correlation figures of each trait with the factor, and the importance rating of each trait. A grand mean for the factor was also calculated.

Work Experience/Paid Employment
Rotated factor analysis

Correlation of trait with "interpersonal skills with others" factor

Demographic information about employer 9.5%

Error 48.4%

Interpersonal skills with others —20.5%

Positive work ethic 21.6%

Work exp with children 0.57
4.15

Responsibilities held 0.60
4.15

Interpersonal-supervis 0.68
4.42

Interpersonal-peers 0.76
4.46

People related work 0.77
4.28

4.29
Grand Mean
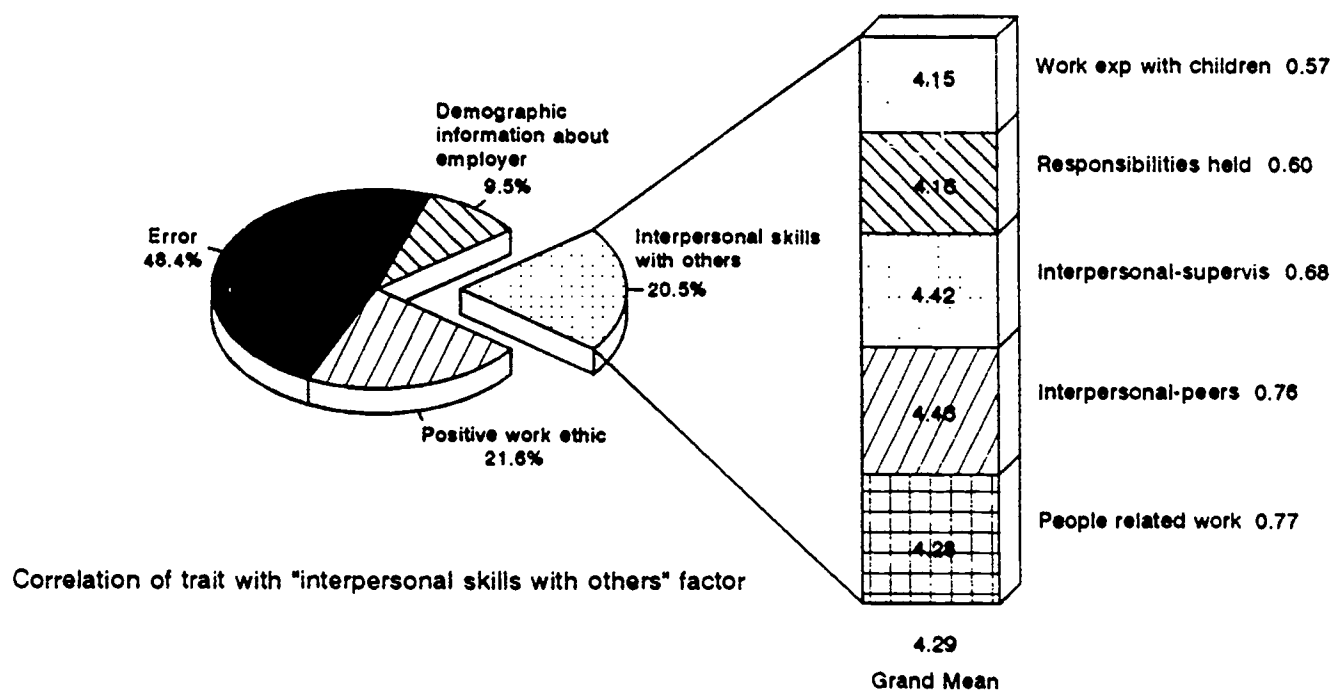
Figure 32. The specific traits which make up the "interpersonal skills with others" factor of "Work Experience/Paid Employment". Included are the correlation figures of each trait with the factor, and the importance rating of each trait. A grand mean for the factor was also calculated.

Work Experience/Paid Employment
Rotated factor analysis

Error
48.4%

3.36   Length of employment 0.47

9.5%
Demographic
information about
employer

2.32   Location of employer 0.65

Positive work ethic
21.6%

20.5%
Interpersonal skills
with others

Size of employer 0.69

2.50

Correlation of trait with "demographic information about employer" factor

2.73
Grand Mean

Figure 33. The specific traits which make up the "demographic information about employer" factor of "Work Experience/Paid Employment". Included are the correlation figures of each trait with the factor, and the importance rating of each trait. A grand mean for the factor was also calculated.

Mean ▇▇▇▇

| 0 | 1 | 2 | 3 | 4 | 5 |

Standard Deviation ▭

Criteria 0.00 .25 .50 .75 1.00 1.25

1 Ability to instill pride of design and work in students — 4 38 / .807
2 Ability to teach skill development within students — 4 36 / .773
3 Ability and interest in incorporating decision making into class — 4 26 / .792
4 Ability and interest in incorporating problem solving into class — 4 27 / .788
5 Ability and interest in incorporating simulations into class — 4.05 / .846
6 Interest in working cooperatively with math and science — 4.03 / .862
7 Knowledge and ability to change curriculum and instruction — 3.99 / .866
8.5 Knowledge of general computer software/word pro, data base etc — 3.95 / .834
8.5 Interest in working with other disciplines than math-science — 3.95 / .889
10 Have a current philosophy of technology education — 3.91 / .911
11.5 Interest in working with applied discp/business, home ec, ag etc — 3.88 / 1.004
11.5 Ability to maintain laboratories and equipment — 3.88 / .957
13 Knowledge of spec. computer software/CAD, CAM, desktop — 3.88 / .891
14 Interest in using group projects and reports — 3.80 / .816
15 Have knowledge of current standards — 3.78 / .896
16 Interest in using individual projects — 3.77 / .789
17 Know technology systems/ physical, information, biotechnology — 3.74 / 1.005
18 Have a defendable rationale for technology education — 3.72 / .930
19 Knowledge of systems/manufact., construction, commun., transp. — 3.71 / 1 074
20 Interest in using individual student reseach and development — 3.66 / .954
21 Use of new delivery devices/CD-ROM, video, hypercard — 3.66 / .974
22 Ability to analyze info on the social impacts of technology — 3.64 / 1.026
23 Knowledge of trade oriencted curric/woods, metals, drafting — 3.60 / 1.093
24 Knowledge of "high tech" equipment/ lasers. robotics, satellites — 3.59 / 1.037
25 Interest in developing industrial contacts — 3 5 / 1 100
26 Ability and interest in developing a technology student club — 3 27 / .962
27 Ability to design new laboratiories /facility layout — 2 92 / 1 028
28 Have an understanding of vocational funding sources — 2 88 / 1 035

N=241

Figure 34. The list of specific criteria relating to hiring "first-time" technology education teachers shown priority order. Their importance is shown with the administrators' mean ratings and standard deviations.

Appendix A: The Research Instrument

A Research Study of
Criteria for Hiring First-Time Teachers
of Grades Seven Through Twelve

Conducted by Iowa State University
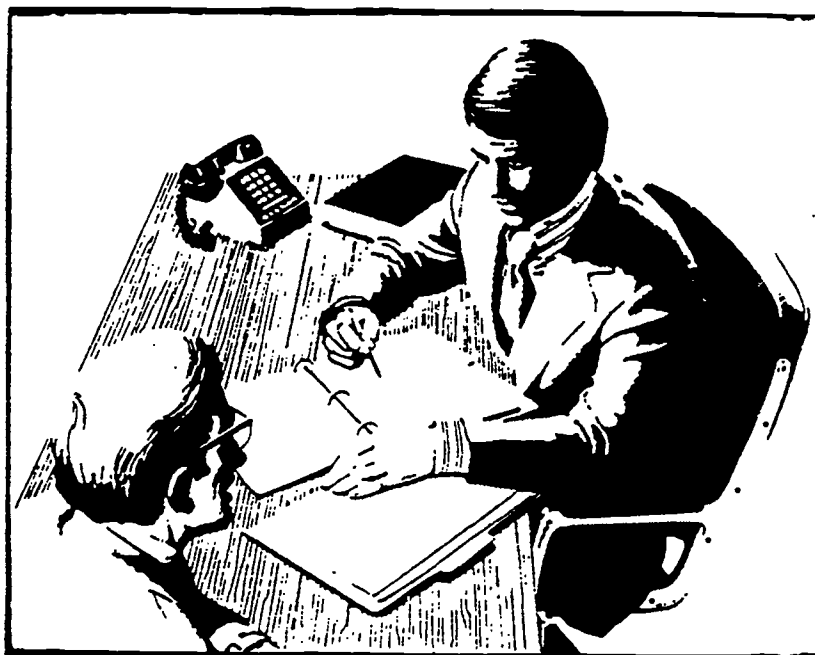
Dr. Roger A. Smith

Department of
Industrial Education and Technology

Directions:

The selection of teachers is a complex and personal decision. Many of the following criteria and individual traits play some part in the selection process. But probably more important is the fact that there is a complex interaction and combination of many traits which make up an individual. We all recognize that each person has strengths and weaknesses, and we try to balance all traits to find the "best" teacher to fit the current position vacancy.

For research purposes, it is important to try and determine the factors which are considered most important in selecting new teachers. Please provide the information requested for each item by marking the appropriate choices. After completing the questionnaire, please fold, tape and return it using the self-addressed postage paid label. Thank you for your participation.

INFORMATION ON HIRING

1. Do you use each of the following *types of information* in hiring a "first-time" secondary teacher? Circle the number for each you use.

	Yes	No		Yes	No
Application form	1	0	Resume	1	0
Transcript	1	0	Personal writing sample	1	0
Minimum NTE test scores	1	0	Personal written references	1	0
Student teaching references	1	0	Telephone references	1	0
Initial screening interview	1	0	On-site interview	1	0
Intuitive personal feeling	1	0	Other_____ (Specify)	1	0

2. Please rate the importance you place on each of the following *criteria* in hiring a "first-time" secondary teacher Choose any number on the scale, 1=very unimportant and 5=very important.

	Very Unimportant				Very Important		Very Unimportant				Very Important
Academic preparation	1	2	3	4	5	Personal traits	1	2	3	4	5
Professional traits	1	2	3	4	5	Work experience	1	2	3	4	5
Professionally related experiences	1	2	3	4	5	Other_____ (Specify)	1	2	3	4	5

3. Next, please indicate the importance of the *academic preparation* criteria you use in hiring a "first-time" secondary teacher. Circle the number from 1 - 5 which indicates the importance of each criterion. (1 = Very unimportant, 5 = Very important)

	Very Unimportant — Very Important						Very Unimportant — Very Important				
Knowledge of subjects to be taught	1	2	3	4	5	Specific courses taken	1	2	3	4	5
Overall grade point average	1	2	3	4	5	Passing a basic skills competency test	1	2	3	4	5
Grade point in chosen major	1	2	3	4	5	Computer knowledge and skill	1	2	3	4	5
Grade point in courses to be taught	1	2	3	4	5	Preparation in coaching a specific sport	1	2	3	4	5
Grade point in student teaching	1	2	3	4	5	Grant writing ability	1	2	3	4	5
Grade point in education courses	1	2	3	4	5	Ability to conduct research	1	2	3	4	5
Taking one year of a foreign language	1	2	3	4	5	Multicultural awareness	1	2	3	4	5
English as a second language	1	2	3	4	5	Length of student teaching assignment	1	2	3	4	5
Knowledge /use of instructional technology	1	2	3	4	5	Diversity of student teaching assignment	1	2	3	4	5
Preparation in directing a specific extracurricular activity	1	2	3	4	5	Other _____ (Specify)	1	2	3	4	5

PERSONAL TRAITS

4. Next we'd like you to evaluate in the same way the *personal traits* you look for in hiring a "first-time" secondary teacher. Again, circle the number from 1-5 which indicates the importance of each criterion. (1 = very unimportant, 5 = very important)

	Very Unimportant — Very Important						Very Unimportant — Very Important				
Ability to follow a leader	1	2	3	4	5	Dependability	1	2	3	4	5
Ability to lead a group	1	2	3	4	5	Enthusiasm	1	2	3	4	5
Ability to work alone	1	2	3	4	5	Neatness/orderliness	1	2	3	4	5
Ability to work with others	1	2	3	4	5	Family background	1	2	3	4	5
Age	1	2	3	4	5	Flexibility/adaptability	1	2	3	4	5
Appearance	1	2	3	4	5	Sense of humor	1	2	3	4	5
Bilingual capabilities	1	2	3	4	5	Initiative/self starter	1	2	3	4	5

	Very Unimportant				Very Important			Very Unimportant				Very Important
Confidence	1	2	3	4	5	Gender	1	2	3	4	5
Listening skills	1	2	3	4	5	High energy level	1	2	3	4	5
Oral communication	1	2	3	4	5	Adaptability/willing to change	1	2	3	4	5
Written communication	1	2	3	4	5	Tolerance of individual differences	1	2	3	4	5
Positive self concept	1	2	3	4	5	No criminal record	1	2	3	4	5
Willingness to work beyond what is required/industry	1	2	3	4	5	Emotional stability/tolerance for stress	1	2	3	4	5
Ethical	1	2	3	4	5	Patience	1	2	3	4	5
Intellect/conceptual ability	1	2	3	4	5	Persistence	1	2	3	4	5
Judgment/logic	1	2	3	4	5	Promptness	1	2	3	4	5
Marital status	1	2	3	4	5	Race	1	2	3	4	5
Number of children	1	2	3	4	5	Religious affiliation	1	2	3	4	5
Cheerful to be around/optimism	1	2	3	4	5	Sensitivity	1	2	3	4	5
Maturity level	1	2	3	4	5	Empathize with others	1	2	3	4	5
Lack of medical disabilities	1	2	3	4	5	Sexual orientation	1	2	3	4	5
Lack of mental disabilities	1	2	3	4	5	U.S. citizenship	1	2	3	4	5
Lack of physical disabilities	1	2	3	4	5	Other _____ (Specify)	1	2	3	4	5
Personal health	1	2	3	4	5						

PROFESSIONAL TRAITS

5. Next evaluate, in the same way, the *professional traits* you look for in hiring a "first-time" secondary teacher. Again circle the number from 1 - 5 which indicates the importance of each criterion. (1 = very unimportant, 5 = very important)

	Very Unimportant				Very Important			Very Unimportant				Very Important
Creative in classroom	1	2	3	4	5	Ability to analyze learning problems	1	2	3	4	5
Ability to deliver content	1	2	3	4	5	Ability to evaluate students	1	2	3	4	5
Ability to organize instructional content/lesson planning	1	2	3	4	5	Ability to provide a positive emotional environment	1	2	3	4	5
Ability to provide a positive physical environment	1	2	3	4	5	Interest in directing a specific extra-curricular activity	1	2	3	4	5

	Very Unimportant → Very Important		Very Unimportant → Very Important
Commitment to confidentiality	1 2 3 4 5	Interest in coaching a specific sport	1 2 3 4 5
Cultural sensitivity	1 2 3 4 5	Curriculum development	1 2 3 4 5
Has personal experiences related to subject matter taught	1 2 3 4 5	Maintains classroom discipline/ classroom management	1 2 3 4 5
Motivates students/rapport	1 2 3 4 5	Problem solving	1 2 3 4 5
Dedicated to the profession	1 2 3 4 5	Having a stated career objective	1 2 3 4 5
Interest in seeking advanced degree	1 2 3 4 5	Strive for excellence	1 2 3 4 5
Willingness to serve on committees	1 2 3 4 5	Professional integrity	1 2 3 4 5
Willingness to participate in research activities	1 2 3 4 5	Professional upgrading/workshops/ reading	1 2 3 4 5
Willingness to chaperon events	1 2 3 4 5	Subject matter knowledge	1 2 3 4 5
Skill at interacting with faculty	1 2 3 4 5	Use of varied teaching strategies	1 2 3 4 5
Skill at interacting with administration	1 2 3 4 5	Other _____ (Specify)	1 2 3 4 5
Skill at interacting with parents	1 2 3 4 5		

PROFESSIONALLY RELATED EXPERIENCE

6. Next, please indicate the importance of *professionally related experience* criteria you use in hiring a "first-time" secondary teacher. Circle the number from 1 - 5 which indicates the importance of each criterion. (1 = very unimportant, 5 = very important)

	Very Unimportant → Very Important		Very Unimportant → Very Important
Awards/scholarships	1 2 3 4 5	Involvement as a student in a honorary or professional fraternity	1 2 3 4 5
Involvement as a student in inter-collegiate athletics	1 2 3 4 5	Involvement as a student in professional education organizations	1 2 3 4 5
Involvement as a student in intramural sports	1 2 3 4 5	Involvement as a student in service organizations	1 2 3 4 5
Involvement as a student in clubs (within major)	1 2 3 4 5	Involvement as a student in social fraternity/sorority	1 2 3 4 5
Involvement as a student in clubs (outside major)	1 2 3 4 5	Involvement as a student in dormitory/ Greek system government	1 2 3 4 5
Involvement as a student in professional education organizations	1 2 3 4 5	Involvement as a student in drama	1 2 3 4 5
Involvement in church	1 2 3 4 5	Work with school age children	1 2 3 4 5

	Very Unimportant				Very Important			Very Unimportant				Very Important
Involvement as a student in University government	1	2	3	4	5	Involvement in charity organizations	1	2	3	4	5
Involvement as a student in music	1	2	3	4	5	Independent living	1	2	3	4	5
Membership in professional education organizations	1	2	3	4	5	Coaching experience	1	2	3	4	5
Involvement in community youth clubs (as a leader)	1	2	3	4	5	Experience sponsoring specific extra-curricular activities	1	2	3	4	5
Involvement in political organizations	1	2	3	4	5	Travel	1	2	3	4	5
						Other _____ (Specify)	1	2	3	4	5

WORK EXPERIENCE/PAID EMPLOYMENT

7. Next we'd like you to evaluate in the same way the *work experience or paid employment* criteria you look for in hiring a "first-time" secondary teacher. Circle the number from 1 - 5 which indicates the importance of each criterion. (1 = very unimportant, 5 = very important)

	Very Unimportant				Very Important			Very Unimportant				Very Important
Absenteeism	1	2	3	4	5	Responsibilities held	1	2	3	4	5
Geographic location of employment	1	2	3	4	5	People related work experience	1	2	3	4	5
Length of employment	1	2	3	4	5	Interpersonal relationship with peers	1	2	3	4	5
Not having been discharged from a position	1	2	3	4	5	Interpersonal relationship with supervisors	1	2	3	4	5
Quality of work performed	1	2	3	4	5	Size of employing agency	1	2	3	4	5
Quantity of work performed	1	2	3	4	5	Work related to subject taught	1	2	3	4	5
Able to follow directions	1	2	3	4	5	Work experience with children	1	2	3	4	5
Punctuality	1	2	3	4	5	Other _____ (Specify)	1	2	3	4	5

TECHNOLOGY EDUCATION

8. One subject area that is changing rapidly is technology education. A changing curriculum, new delivery techniques and the management of new and expensive equipment and facilities challenges new teachers. Next we would like you to indicate the importance you place on the following *criteria* in hiring a "first-time" technology educator/industrial arts teacher. Circle the number from 1 - 5 which indicates the importance of each criterion. (1 = very unimportant, 2 = very important)

	Very Unimportant				Very Important

	Very Unimportant → Very Important		Very Unimportant → Very Important
Have a defendable rationale for technology education	1 2 3 4 5	Ability to teach skill development within students	1 2 3 4 5
Interest in using individual projects	1 2 3 4 5	Have a current philosophy of technology education	1 2 3 4 5
Interest in using group projects and reports	1 2 3 4 5	Ability to instill pride of design and work in students	1 2 3 4 5
Have an understanding of vocational funding sources	1 2 3 4 5	Interest in using individualized student research & development	1 2 3 4 5
Have knowledge of current standards	1 2 3 4 5	Knowledge and ability to change curriculum and instruction	1 2 3 4 5
Interest in developing industrial contact	1 2 3 4 5	Knowledge of general computer software/word processing, data bases, spread sheets, paint programs	1 2 3 4 5
Ability to design new laboratories/facility layout	1 2 3 4 5	Knowledge of specialized computer software/computer aided design, computer aided manufacturing, desktop, publishing	1 2 3 4 5
Ability to maintain laboratories and equipment	1 2 3 4 5		
Ability and interest in developing a technology student club	1 2 3 4 5	Knowledge of "high tech" equipment/lasers, robotics, satellites	1 2 3 4 5
Interest in working cooperatively with "applied" disciplines/business education, home economics, agriculture	1 2 3 4 5	Use of new delivery devices/CD-ROM, interactive video, hypercard	1 2 3 4 5
Interest in working cooperatively with math and science	1 2 3 4 5	Ability and interest in incorporating problem solving into the curriculum	1 2 3 4 5
Interest in working cooperatively with other disciplines other than "applied" or math-science	1 2 3 4 5	Ability and interest in incorporating decision making into the curriculum	1 2 3 4 5
Knowledge of trade oriented curriculum/woods, metals, plastics, drafting, automotives, electronics	1 2 3 4 5	Ability and interest in incorporating simulations into the curriculum	1 2 3 4 5
Knowledge of industrial systems curriculum/manufacturing, construction, communications, and transportation	1 2 3 4 5	Ability to gather and analyze information on the social impacts of technology	1 2 3 4 5
Knowledge of technology systems curriculum/physical, information, and biotechnology systems	1 2 3 4 5	Other _____ (Specify)	1 2 3 4 5

GENERAL INFORMATION

The final questions relate to you and your background as well as the educational system you are involved with. Please answer all questions by circling the appropriate number or filling in the appropriate line.

9.   What is your position?

    1 Principal   3 Other _____
                                      (Specify)
    2 Superintendent

10. What is the highest degree you have obtained, the year earned the degree and the institution which granted it?

		Year Earned	Institution Granting
_____	BA/BS	1 9 __ __	_____
_____	MA/MS	1 9 __ __	_____
_____	Specialist	1 9 __ __	_____
_____	Ph.D./Ed.D.	1 9 __ __	_____

11. Are you ...

    1 Female

    2 Male

12. What is your age? __ __

13. How many years did you teach? (Non-administration) __ __

14. How many years have you been an administrator? (Part-time or full-time) __ __

15. How many years have you been an administrator in your current school district? __ __

16. What is the enrollment in your entire school district? __ __,__ __ __

17. How many graduates did you have in 1991 for the entire school district? __,__ __ __

18. About what percent of your 1991 graduating class took the following standardized exams?

    __ __% of the students took the ACT exam

    __ __% of the students took the PSAT exam

    __ __% of the students took the SAT exam

19. What were the average standardized scores for the 1991 graduates of your

    district? Enhanced ACT composite score __ __

           PSAT: Verbal __ __   Math __ __

           SAT: Verbal __ __ __   Math __ __ __

20. About what percent of your 1991 graduating class will pursue four-year post-secondary education? ___ ___%

21. About what percent of your 1991 graduating class will pursue two-year post-secondary education? ___ ___%

22. What is the per pupil expenditure in your district? $__,__ __ __

23. What percent of the students in your district/building receive free or reduced hot lunch? ___ ___%

Thank you for your participation.

Comments about hiring procedures or this research study:

If you would like a summary of the results of this study please write your name and address below:

_____
Name

_____
School

_____
Address

_____   _____   _____
City   State   Zip Code