Beginning Special Education Teachers: At Risk for Attrition.

Recognizing the importance of early experience to job satisfaction and commitment, this study was conducted to investigate the effect of support from administration on the induction and retention of 457 beginning public school, special education teachers. Secondary analysis techniques were applied to information derived from the 1987-88 cross sectional database Schools and Staffing Survey (SASS), with concentration on results of the Perceptions and Attitudes toward Teaching section. Findings suggest that the presence of administrative support is significant to beginning special education teachers in scheduling conferences and Individualized Education Plan meetings, providing information, and giving authorization to act; in allowing novices' participation in educational decision making and staff meetings; in providing appropriate resources; and in recognizing progress made. The findings in this study confirm previous research that aspects of the teaching climate can help to ameliorate conditions that may lead to attrition of new teachers. This conclusion may strongly influence educational policy making. It supports the call for the provision of mentoring and other beginning teacher induction programs. (Contains 21 references.) (LL)
Beginning Special Education Teachers: At Risk for Attrition

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Beginning Special Education Teachers:

At Risk for Attrition

Nearly 2.8 million teachers were on the job when schools across the country opened their doors this fall (United States Department of Education, 1991). However, national reports and surveys continue to document the shortages in the supply of teachers (e.g., AACTE, 1984; Futrell, 1989; Gunderson & Karge, in press; Smith-Davis, 1990). Special Education is consistently identified as one of the areas of greatest shortage (Darling-Hammond, 1988; "The Marketplace," 1990). As many as thirty percent of special education teachers do not meet the certification standards of their states (Office of Special Education Programs, 1991; Schrag, 1989). Nearly 80% of the states responding to an investigation reported by Barr (1990) have alternative certification procedures that are specifically designed to address shortages in special education.

Increasingly, school districts find that they are unable to recruit sufficient numbers of fully trained special education teachers to meet their needs. This means that districts resort to employing teachers with emergency special education credentials, teachers on waivers, or long-term substitute teachers of unspecified preparation backgrounds. This option clearly can be detrimental to both the special students and to the teachers involved. Under these conditions, there is little assurance of appropriate or adequate services to meet students' special educational needs. Often with mainstream integration is delayed and/or unsuccessful. For teachers, inappropriate expectations, lack of special skills, limited support, and attendant job dissatisfaction result in an unusually high teacher turnover.

Researchers (i.e. Erekson & Barr, 1985; Karge, Young, & Sandlin, 1992) suggest that provisionally certified teachers have abnormally high turnover rates as compared to their colleagues who went through a traditional training program.
and began their jobs fully credentialed. Therefore, type of teacher certification has a significant relationship with job longevity. Teachers who completed a training program that terminated with a full certificate have spent significantly more years in the special education field than those who have an alternative certification (Banks & Necco, 1987).

Once fully certified, it is crucial that the beginning special education teachers have a support system to enhance their experiences as new teachers (Chapman, 1983; Jensen, 1987; National Clearinghouse for Professions in Special Education, 1989; University of Wisconsin-Whitewater, 1989). Among teachers who remain committed to the profession, job satisfaction is linked to effective collegial support (Fimian & Santoro, 1983; Weber & Toffler, 1989) and supportive relations with school-site personnel (Jensen, Mortorff & Meyers, 1992).

**Schools and Staffing Survey**

President Bush and the governors of our country recently established national educational goals. In a response to the national educational goals and as a means of supporting research in education, Congress has mandated the collection of large scale national data bases. The National Center for Education Statistics, U.S. Department of Education, Office of Educational Research and Improvement was established to "collect, analyze, and disseminate statistics and other data related to education in the United States and in other nations " -Section 406(b) of the General Education Provisions Act, as amended (20 U.S.C. 1221e-1). These national data bases include a wealth of data on students, their families, schools and teachers. One such database is the *Schools and Staffing Survey (SASS)*, (n=23,088). SASS was designed to meet the continuing need to collect data on characteristics of teachers and administrators and their work place conditions. The Schools and Staffing Survey responds to the literature call for data on teacher supply.
and demand. Presently studies are conflicting; is there a teacher shortage? Additionally SASS reacts to the lack of data on school work force. Who are our teachers and administrators? Finally, SASS reverts to the lack of data on school conditions and program policies. Are schools responding to reform initiatives?

SASS was conducted in the 1987-88 school year, again in 1990-91, and will be conducted at 2-year intervals hereafter. At the time of this writing, only the 1987-88 data was available for secondary analysis.

Bobbitt (1991) conducted a factor analysis utilizing all questions in the Perceptions and Attitudes Toward Teaching section of SASS. Four composite factors emerged; administrative support, enforcement of rules, staff cooperation, adequacy of resources. Freiberg and Karge (1992) utilized a regression equation to establish the effect of the four composite variables, student achievement level, after school work load, gender, age, marital status, and the second thoughts about the career choice on the intention to stay in teaching for 2,000 beginning elementary public school teachers. All variables indicated revealed significant effect, however, support from administration, appeared to be one of the most influential.

The investigators recognize the importance of early experiences to job satisfaction and commitment to the profession for teachers. Further, they endorse research recommending support as a vital component for all beginning teachers but particularly for special education teachers. Utilizing Bobbit's composite variable, support from administration, and Freiberg and Karge's (1992) findings that support from administration was statistically the most significant effect on retention of new teachers, this study will examine the specific types of support beginning special education teachers need to successfully accomplish their jobs. The research in this literature review
strongly substantiates the importance of administration support for special education teachers. However, the studies cited include small sample sizes and are state specific. If using a large nationwide sample in this study reveals similar findings, it is suggested that this information could influence national policy decisions regarding teacher induction and support during their first years as special education teachers.

Method

Sample Selection

The data for secondary analysis was taken from 23,088 Public School Teacher Questionnaires from the cross sectional data base, Schools and Staffing Survey (SASS). Teachers were carefully selected for their participation in the 1987-88 Schools and Staffing Survey. The following sections describe how public schools and teachers were selected for the 1987-88 SASS.

Selection of schools for SASS. Schools are the primary sampling unit for the SASS, and a sample of teachers are selected in each school. The public school sample of 9,317 schools was selected from the Quality Education Data (QED) file of public schools. All public schools in the file were stratified by the 50 States and the District of Columbia, and then by three grade levels (elementary, secondary, and combined). For each stratum within each state, sample schools were selected by systematic (interval) sampling with probability proportional to the square root of the number of teachers within a school.

Selection of teachers for SASS. All 23,088 school teachers in the teacher samples were selected from the 9,317 public schools. A list which included all full-time and part-time teachers, itinerant teachers, and long-term substitutes was obtained from each sample school. Within each school, teachers were
stratified by experience; one stratum included new teachers, and a second stratum included all other teachers. New teachers were those who, counting the 1987-88 school year, were in the first, second, or third year of their teaching career in either a public or private school system. Within each teacher stratum, elementary and secondary teachers were sorted by subject. Elementary teachers were sorted by general elementary education, special education, and other. Secondary teachers were sorted by mathematics, science, English, social science, vocational education, and other.

There were 457 beginning, special education, public school teachers in the sample. These teachers will be the focus of this paper. "Beginning" teacher refers to a teacher who has been in the classroom full-time for less than three years. "Special Education teacher" alludes to a teacher who indicated having a field-state certificate in special education and are teaching in a special education assignment. Table 1 provides demographic data of the sample.

Insert Table 1 about here

Instrumentation

The Schools and Staffing Survey includes four components: (a) Teacher Demand and Shortage Questionnaire; (b) School Questionnaire; (c) School Administrator Questionnaire; and (d) Teacher Questionnaire. This investigation utilized only the Teacher Questionnaire. The 52-item questionnaire surveys teachers regarding demographic characteristics, teacher preparation and qualifications, career history and plans, teaching assignments, working conditions, and perceptions of school environment and the teaching profession.
Data Collection Procedures

The Census Bureau was the data collection agency for the Schools and Staffing Survey. The survey was conducted by mail with telephone follow-up. The basic sample of teachers was selected from the sample schools in each stratum so the teacher weights were approximately equal. New teachers were not oversampled. Finally, an equal probability, systematic sampling scheme was applied to select the basic sample within each school.

In the data collection phase of the survey, a subsample of nonmail returns (57 percent of nonmail returns) was followed up by telephone during April, May, and June. This subsample had their weights adjusted to reflect the subsampling.

Data Analysis

For the purposes of this paper, the investigators employed secondary analysis techniques to the data from the 457 new special education public school teachers who had completed the SASS. Descriptive data including means, standard deviations, percentiles and correlations were run. Several ANOVAs and a MANOVA were conducted to further confirm and expand findings from a previous study (Freiberg & Karge, 1992). To account for design effects, weighting was used in the statistical analysis. An estimated total was given by the sum of the sample values, each multiplied by its sample weight.

Results and Discussion

The descriptive data reveal several noteworthy findings. Seventy-five percent of the 457 beginning special education teachers reported they worked with children with disabilities in a self-contained class. Grade levels ranged from prekindergarten to grade twelve. The majority of the teachers worked at elementary school sites with 38% of the subjects working with children.
grades K-3, 32% working with grades 4-6, and 30% indicating they worked with secondary students (grades seven to twelve). The average class size for the special education teachers was 15 students.

The special education teachers indicated they spend an average of 12.72 hours a week working on school related business during after school hours. Twenty-three percent of the sample worked as a teacher's aide previous to occupation in the field of education. Additionally, 46% of the sample implied they are working on advanced degrees by stating that their primary activity outside of teaching is attending a college or university. The educational backgrounds of the beginning special education teachers revealed that less than 1% of the special education teachers did not complete a bachelor's degree and 26% had a master's degree.

Teacher salary schedules in the public school districts ranged from an average of $17,200 for teachers with a bachelor's degree and no experience, to $28,400 for those with a master's degree and 20 years experience. The beginning special education teacher made an average of $21,300. Considering most of these teachers spend close to 60 hours a week on job related activities, they certainly are not in the profession for the money!

A one-way ANOVA was used to determine whether the differences among the sample means were greater than would be expected from sampling error alone. In ANOVA all differences for all pairs of means are examined simultaneously to see if one or more of the means deviate significantly from one or more of the other means.

When significance was established at $p \leq 0.05$, and the variables were weighted, six factors from the possible nine Administrative Support and Leadership composite (Bobbitt, 1991) resulted as statistically significant. Figure 1 refers to all nine factors from the Administrative Support and
Leadership composite. Table 2 indicates the findings of the ANOVA's. To cross validate the findings the investigators divided the sample into two sets and reanalyzed the data. The same six factors emerged.

Very often the price one pays when using a statistical technique that makes relatively few assumptions is a loss of power in detecting differences, especially when the number of contrasts is large relative to the number in the sample. To avoid this loss of power, in anticipation of a type I error rate that exceeds the stated alpha level of the tests, the investigators performed a multivariate analysis of variance (MANOVA).

Multivariate analysis of variance is simply the extension of the univariate analysis of variance model to a set of response variables (i.e., a vector) rather than just a single dependent measure. The multivariate test is an assessment of whether the mean vectors of the polynomial contrasts are different among the several levels of each factor. The method essentially combines, in a linear fashion, the information in the several response variables in such a way as to detect any existing treatment effects. All of the random variables are analyzed simultaneously as a random vector having a multivariate distribution. The MANOVA test was significant, \( F (1,457)=46.7 \) (\( p<.05 \)), indicating that a significant difference was found for the two mean vectors. Thus group comparison of the specific questions is permissible.
Conclusions and Policy Recommendations

The presence of administrative support is very important to beginning special education teachers. As indicated above, when significance was established at p≤.05, and the variables were weighted, six of the nine factors from the Administrative Support and Leadership composite (Bobbitt, 1991) resulted as statistically significant. The investigators were surprised that three of the variables were not significant. However, upon inspection of the remaining six it is apparent this study reports results similar to previous studies.

Beginning special education teachers are expected to participate in numerous special education related tasks (IEP's, parent meetings, school site council meetings etc.) in addition to their roles as a classroom teacher. Support from the school administration is vital in carrying out these additional tasks. Administrative support in the form of scheduling conferences and Individualized Education Plan meetings, providing information, and giving authorization to act are essential to the functioning of a special education program (Table 2 - Q29c). Unfortunately the SASS questionnaire does not allow for open-ended responses, therefore we do not know precisely what each teacher does each minute of the day. However, we can certainly infer and generalize from classrooms from which we are familiar. A supportive administrator understands the demands on the teachers time and offers support and encouragement.

It is crucial that teachers be allowed to participate in important educational decision making at their school site (Table 2 - Q29f). Special education teachers need to be an intriguial part of the staff, participating and sharing at staff meetings, facilitating ongoing teacher trainings and providing recommendations for classroom management and instructional strategies.
Q29i, 29l, and 29o all refer to principal support; which is obviously tied to administration support (Table 2 - Q29c). Having appropriate resources (books, tapes, access to core curriculum, computers, etc.) reduces beginning special educators' workloads, thus freeing time for planning and actual student instruction. Having a principal who is current on and able to discuss empirically based instructional practices is pivotal to growth and development as is the principals' communication of clear standards and expectations.

Finally when teachers are productive and make progress they should be recognized (Table 2 - 29q). Recognition could be as simplistic as a thank you, or an opportunity to be excused from a faculty meeting or as elaborate as a plaque or certificate. These findings strongly endorse the importance of administration support for special education teachers.

The findings in this study confirm previous research that aspects of the teaching climate can help to ameliorate conditions that may lead to attrition of new teachers (Baum, 1987; Bogenschild, Gunderson & Karge, 1992; Lauritzen, & Metze, 1988; Holmes, Impink-Hernandez, & Terrell, 1988). This conclusion may strongly influence educational policy making. It supports the call for the provision of mentoring and other beginning teacher induction programs aimed at assisting teachers during their first years of teaching. If such support programs are not in place beginning special education teachers are at risk for attrition.

Limitations

This study focused on only one set of the many items addressed in the SASS. Further analyses in the future should examine other characteristics from a multivariate perspective with the ultimate goals of building a solid
empirical framework for the study of teachers and of guiding policymakers in their ongoing efforts to improve education in America.
References


Figure 1
Schools and Staffing Survey
Public School Teachers Questionnaire
Section 5 - Perceptions and Attitudes Toward Teaching

Administrative Support and Leadership Composite*

Q29: Do you agree or disagree with each of the following statements?

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<thead>
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<th></th>
<th>Description</th>
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<tr>
<td>29a</td>
<td>Fair teacher evaluation</td>
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<tr>
<td>29b</td>
<td>Principal expectation is clear</td>
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<tr>
<td>29c</td>
<td>School administration is supportive and encouraging</td>
</tr>
<tr>
<td>29f</td>
<td>Teachers participate in important educational decisions</td>
</tr>
<tr>
<td>29i</td>
<td>Principal gets resources for school</td>
</tr>
<tr>
<td>29l</td>
<td>Principal discusses instructional practices</td>
</tr>
<tr>
<td>29o</td>
<td>Principal communicates expectations</td>
</tr>
<tr>
<td>29q</td>
<td>Staff recognition</td>
</tr>
<tr>
<td>29u</td>
<td>Goals and priorities are clear</td>
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*Composite score based on factor analysis of Teacher Survey - Item 29 (Bobbitt, 1991)
Table 1
Data on Demographic characteristics

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<th>Sex</th>
<th>% of sample</th>
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<tr>
<td>male</td>
<td>39%</td>
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<tr>
<td>female</td>
<td>61%</td>
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<th>Age</th>
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<tr>
<td>under 30</td>
<td>20.7</td>
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<tr>
<td>30-39</td>
<td>38.3</td>
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<tr>
<td>40-49</td>
<td>20.7</td>
</tr>
<tr>
<td>50 and over</td>
<td>14.3</td>
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<table>
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<tr>
<th>Race-ethnicity</th>
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<td>American Indian or Alaskan Native</td>
<td>10.1</td>
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<tr>
<td>Asian or Pacific Islander</td>
<td>10.8</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>17.1</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>39.0</td>
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<tr>
<td>Hispanic</td>
<td>23.0</td>
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</table>
Table 2  
Schools and Staffing Survey  
Public School Teachers Questionnaire  
Section 5 - Perceptions and Attitudes Toward Teaching

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<thead>
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<th>Administrative Support and Leadership Composite*</th>
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<tbody>
<tr>
<td>Q29: Do you agree or disagree with each of the following statements?</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Q29</th>
<th>Statement</th>
<th>Significance Level</th>
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<tr>
<td>29c</td>
<td>School administration is supportive and encouraging</td>
<td>.05</td>
<td>42.80</td>
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<td>29f</td>
<td>Teachers participate in important educational decisions</td>
<td>.05</td>
<td>38.57</td>
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<td>29i</td>
<td>Principal gets resources for school</td>
<td>.05</td>
<td>45.86</td>
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<td>29l</td>
<td>Principal discusses instructional practices</td>
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<td>29o</td>
<td>Principal communicates expectations</td>
<td>.05</td>
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<td>29q</td>
<td>Staff recognition</td>
<td>.05</td>
<td>28.02</td>
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*Composite score based on factor analysis of Teacher Survey - Item 29 (Bobbitt, 1991)  
**n=457