Attrition statistics were analyzed for the entire teaching population in Wisconsin from 1984-1988. Teachers with provisional certification were more likely to leave teaching than were fully certified teachers during the first 2 years of the study, but during the third year of the study, attrition rates were comparable. Attrition rates of special education teachers were significantly higher than those of general education teachers. The attrition rate for teachers under age 35 was higher than the rate for teachers over 35. Attrition rates of teachers with graduate training were lower than attrition rates of teachers with undergraduate training only. There were no significant differences in attrition rates among rural and urban teachers. In addition to the statistical analysis, a survey was sent to 400 Wisconsin teachers, including 100 special education teachers and 100 general education teachers who had remained in teaching, and 100 special education teachers and 100 general education teachers who had left teaching; 61% of the teachers completed survey instruments. Factors highly correlated with teachers remaining in the field included: the opportunity to work on and make decisions about curriculum development, administrative support, support from other professionals, and the nature of the first teaching experience. (JDD)
Information on Personnel Supply and Demand

A STUDY OF TEACHER ATTRITION

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1988

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NATIONAL CLEARINGHOUSE FOR PROFESSIONS IN SPECIAL EDUCATION
The Supply/Demand Analysis Center
The Council for Exceptional Children
1920 Association Drive • Reston, Virginia 22091
703/620-3660 SpecialNet: PROFESSIONS
THE CRITICAL SHORTAGE of special education teachers is a national problem that is exacerbated by teacher attrition. Accurate data on attrition are necessary in order to make predictions about the supply of and demand for special education teachers. Several factors complicate the issue of attrition in special education. First, there are more emergency certifications (temporary licenses issued to teachers without complete special education training) issued in special education than in any other area of education. In no other area of education is the problem of teachers who are not fully certified to teach so pervasive (Lauritzen, 1987). Second, the teacher population in special education is generally younger than the population in general education, and various research studies indicate that nearly 50% of newly trained teachers leave within the first six years of teaching (Jensen, 1986; Lauritzen, 1987). Finally, hiring practices, experimental delivery systems, and administrative structures affect attrition in special education.

METHOD

A study of attrition was taken for two purposes. First, through an examination of the Wisconsin Department of Public Instruction's database, the attrition rates of teachers in both general and special education were calculated. Since this database was used, the entire population of teachers in Wisconsin was included in this phase of the study. Second, a survey was sent to a sample of 400 teachers (100 special education teachers and 100 general education teachers who had remained in teaching, and 100 special education teachers and 100 general education teachers who had left teaching). The survey instrument sought to determine what factors led to teacher attrition. A completed survey instrument was returned by 61% of the sample (including 100% of the special education teachers who were still teaching). Those who did not respond by the deadline were followed up by telephone to encourage response or to determine reasons for not responding.

The survey was designed specifically for this study and was a distillation of factors identified as causes of attrition in previous research. The instrument included factors in several areas:

* Administrative support
* Conditions of the profession (salary, hours, vacations, career advancement, paperwork)
* Opportunity to work on curriculum development
* Support from other professionals
* Opportunity for assistance with problem solving

Attrition: #4
A STUDY OF TEACHER ATTRITION

* Parental support
* The intrinsic rewards of teaching (meeting student needs, seeing growth in students
* Availability of materials
* Ability to try new methods and materials

RESULTS

The analysis of the Wisconsin Department of Public Instruction's database provided attrition statistics for the entire teaching population in Wisconsin over a four-year period from 1984 to 1988. The statistics were calculated over a period of years to determine whether or not the attrition rates remained stable. For the purposes of this study, attrition was defined as those teachers who left their certification category.

Table 1 shows a summary of the attrition rates of fully certified teachers over the four-year period. The table provides separate statistics for categorical and multicategorical programs in Wisconsin. Two multicategorical program models, Multicategorical (MC) and Special Needs Delivery System (SNDS), are currently given conditional approval in Wisconsin.

<table>
<thead>
<tr>
<th></th>
<th>1985-86</th>
<th>1986-87</th>
<th>1987-88</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEAF</td>
<td>16.7%</td>
<td>13.7%</td>
<td>9.8%</td>
</tr>
<tr>
<td>EARLY CHILDHOOD</td>
<td>10.7%</td>
<td>14.9%</td>
<td>11.9%</td>
</tr>
<tr>
<td>EMOTIONALLY DISTURBED</td>
<td>16.9%</td>
<td>16.5%</td>
<td>14.5%</td>
</tr>
<tr>
<td>LEARNING DISABILITIES</td>
<td>11.9%</td>
<td>11.3%</td>
<td>10.7%</td>
</tr>
<tr>
<td>MENTAL RETARDATION</td>
<td>15.7%</td>
<td>15.5%</td>
<td>13.7%</td>
</tr>
<tr>
<td>SPEECH/LANGUAGE</td>
<td>8.3%</td>
<td>8.5%</td>
<td>7.4%</td>
</tr>
<tr>
<td>VISUAL IMPAIRMENT</td>
<td>17.2%</td>
<td>20.0%</td>
<td>13.7%</td>
</tr>
<tr>
<td>CATEGORICAL TOTAL</td>
<td>13.1%</td>
<td>12.9%</td>
<td>11.6%</td>
</tr>
<tr>
<td>MULTICATEGORICAL</td>
<td>44.7%</td>
<td>38.5%</td>
<td>41.4%*</td>
</tr>
<tr>
<td>SNDS</td>
<td>43.5%</td>
<td>33.1%</td>
<td>55.2%*</td>
</tr>
<tr>
<td>SPECIAL EDUCATION TOTAL</td>
<td>15.6%</td>
<td>14.6%</td>
<td>13.7%</td>
</tr>
<tr>
<td>REGULAR EDUCATION</td>
<td>6.5%</td>
<td>6.3%</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

* These percentages represent a combination of teachers who left multicategorical programs and teachers who left because multicategorical programs were discontinued.

Attrition: #4
Attrition rates for provisionally certified teachers were calculated separately, since preliminary studies indicated that the attrition rates of teachers with provisional certification were higher than those of fully certified teachers. Table 2 provides a summary of the attrition rates of provisionally certified Wisconsin special education teachers.

**TABLE 2**

Summary of Attrition Rates of Provisionally Certified Wisconsin Teachers 1984-1988

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DEAF</td>
<td>NONE</td>
<td>NONE</td>
<td>0.0%</td>
</tr>
<tr>
<td>EARLY CHILDHOOD</td>
<td>22.2%</td>
<td>15.8%</td>
<td>10.6%</td>
</tr>
<tr>
<td>EMOTIONALLY DISTURBED</td>
<td>22.2%</td>
<td>21.5%</td>
<td>12.0%</td>
</tr>
<tr>
<td>LEARNING DISABLED</td>
<td>14.9%</td>
<td>20.3%</td>
<td>11.6%</td>
</tr>
<tr>
<td>MENTALLY RETARDED</td>
<td>22.2%</td>
<td>11.1%</td>
<td>11.5%</td>
</tr>
<tr>
<td>SPEECH/LANGUAGE</td>
<td>26.0%</td>
<td>8.3%</td>
<td>4.9%</td>
</tr>
<tr>
<td>VISUALLY IMPAIRED</td>
<td>NONE</td>
<td>NONE</td>
<td>NONE</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>19.7%</strong></td>
<td><strong>19.6%</strong></td>
<td><strong>11.3%</strong></td>
</tr>
</tbody>
</table>

Attrition rates of both special education and general education teachers were calculated, by age. This information was necessary to determine the extent to which variables such as retirement will affect the supply of and demand for teachers in the future. The information used to calculate these statistics also gave a profile of the age of the teaching population in Wisconsin. The majority (55%) of special education teachers in Wisconsin are under 40; 66% are under 45. The majority of teachers in general education are over 40 (52%); 22% are between 35 and 40; 26% are under 35.

Table 3 presents the attrition rates of Wisconsin teachers, by age.
## TABLE 3
Summary of Attrition Rates of Wisconsin Teachers
By Age 1986-1987

<table>
<thead>
<tr>
<th>AGE</th>
<th>DEAF</th>
<th>EC</th>
<th>MR</th>
<th>LD</th>
<th>SL</th>
<th>VI</th>
<th>ED</th>
<th>TOTAL</th>
<th>REG ED</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;25</td>
<td>0%</td>
<td>13%</td>
<td>23%</td>
<td>19%</td>
<td>11%</td>
<td>-</td>
<td>21%</td>
<td>19%</td>
<td>17%</td>
</tr>
<tr>
<td>26-30</td>
<td>52%</td>
<td>19%</td>
<td>23%</td>
<td>13%</td>
<td>15%</td>
<td>33%</td>
<td>21%</td>
<td>18%</td>
<td>15%</td>
</tr>
<tr>
<td>31-35</td>
<td>13%</td>
<td>9%</td>
<td>15%</td>
<td>12%</td>
<td>9%</td>
<td>0%</td>
<td>18%</td>
<td>13%</td>
<td>10%</td>
</tr>
<tr>
<td>36-40</td>
<td>10%</td>
<td>15%</td>
<td>13%</td>
<td>9%</td>
<td>6%</td>
<td>25%</td>
<td>14%</td>
<td>11%</td>
<td>7%</td>
</tr>
<tr>
<td>41-45</td>
<td>17%</td>
<td>13%</td>
<td>11%</td>
<td>11%</td>
<td>6%</td>
<td>0%</td>
<td>6%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>46-50</td>
<td>33%</td>
<td>8%</td>
<td>4%</td>
<td>7%</td>
<td>2%</td>
<td>0%</td>
<td>6%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>51-55</td>
<td>0%</td>
<td>17%</td>
<td>11%</td>
<td>8%</td>
<td>4%</td>
<td>0%</td>
<td>15%</td>
<td>9%</td>
<td>5%</td>
</tr>
<tr>
<td>56-60</td>
<td>29%</td>
<td>0%</td>
<td>15%</td>
<td>10%</td>
<td>0%</td>
<td>-</td>
<td>6%</td>
<td>10%</td>
<td>11%</td>
</tr>
<tr>
<td>61-65</td>
<td>-</td>
<td>100%</td>
<td>30%</td>
<td>13%</td>
<td>0%</td>
<td>-</td>
<td>50%</td>
<td>25%</td>
<td>33%</td>
</tr>
<tr>
<td>&gt;65</td>
<td>-</td>
<td>29%</td>
<td>60%</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>33%</td>
<td>38%</td>
</tr>
<tr>
<td>NO AGE*</td>
<td>-</td>
<td>15%</td>
<td>0%</td>
<td>11%</td>
<td>8%</td>
<td>-</td>
<td>31%</td>
<td>17%</td>
<td>14%</td>
</tr>
</tbody>
</table>

* This represents teachers who did not report their age (approximately 17% of the special education teachers).

Finally, attrition rates were calculated for rural and urban teachers. The 50 largest cities in Wisconsin (based on the most recent census) were considered urban. Table 4 presents the attrition rates of urban and rural teachers.

## TABLE 4
Summary of Attrition Rates of Rural and Urban Wisconsin Teachers
1984-1987

<table>
<thead>
<tr>
<th></th>
<th>URBAN</th>
<th>RURAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECIAL EDUCATION</td>
<td>11.4%</td>
<td>13.4%</td>
</tr>
<tr>
<td>REGULAR EDUCATION</td>
<td>8.3%</td>
<td>8.2%</td>
</tr>
</tbody>
</table>

Attrition: #4
A STUDY OF TEACHER ATTRITION

The survey of 400 Wisconsin teachers was used to determine whether or not teachers who had left could be distinguished from those who had remained in teaching, on the basis of the variables included on the survey instrument. Discriminant analysis was used to determine whether teachers could be correctly classified as remaining in or leaving teaching on the basis of the survey variables. When general education teachers and special education teachers were pooled, 80% of the teachers were grouped correctly. When discriminant analysis was done for general education teachers, 91.8% were grouped correctly. Using discriminant analysis, 85% of the special education teachers were grouped correctly.

DISCUSSION

Chi square was used to test the null hypotheses. Significant differences in attrition rates (p < .001) were found for fully certified and provisionally certified special education teachers, general and special education teachers, teachers under 35 and teachers over 35, teachers with six or more years of experience, teachers with one to five years' experience, and teachers with graduate and undergraduate training. There was no significant difference in attrition rates among rural and urban teachers.

Teachers with provisional certification were more likely to leave teaching than were fully certified teachers during the first two years of the study. During the third year of the study, attrition rates of provisionally certified teachers were comparable to those of fully certified teachers. Although provisional certification may be used as a solution to the teacher shortage, the results of this study suggest that this practice does not offer a long-term solution to the problem of teacher shortage in special education. For example, in Wisconsin, the two areas with the most critical teacher shortages are learning disabilities and emotional disturbance, and nearly one-fifth of these teachers left teaching during the first three years of the study.

Attrition rates of special education teachers are significantly higher than those of general education teachers. The rate of attrition of teachers in multica
categorical programs is three times the attrition rate of teachers in any single
categorical program. These programs are provisionally approved in Wisconsin at this time, and certification in these programs consists of certification in the categories of children included in the program (for example, mental retardation and learning disabilities, or learning disabilities and emotional disturbance). The higher attrition rates may indicate that training programs leading to multica
categorical certification need to be implemented in Wisconsin, since these teach-
ers may have training needs not currently addressed in categorical training pro-
grams. On the other hand, the high rate of attrition among teachers in multi-
categorical programs may also indicate that the diversity of learning needs, problems, styles, and other characteristics of children placed in multica
gorical groups is too great even for a well trained teacher.

The shortage of teachers in special education is exacerbated by high attri-
tion rates. The quality of education offered to special education students de-
deps on stable educational programs and the availability of qualified personnel. At the present time, problems exist in both of these areas in special educa
c, Clearly, efforts must be made to recruit prospective teachers and to retain fully trained teachers in special education.
A STUDY OF TEACHER ATTRITION

Another alarming finding of this study is the fact that the attrition rate for teachers under age 35 is significantly higher than attrition rates of teachers over 35. Thus, newly trained teachers are more likely to leave education. Although many factors lead teachers under 35 to leave teaching (including raising families, transfer of spouse, and career changes), it is evident that retaining teachers under 35 is of critical importance.

Teachers with less than five years' experience are also more likely to leave teaching than teachers with six or more years' experience. Perhaps this indicates that those people who are dissatisfied with teaching leave within the first five years, but it may also indicate a failure of the profession to socially integrate new teachers into the profession. Chapman's (1983) research indicates that social integration factors, isolation from peers, infrequent interactions with peers, and lack of collaboration lead to teacher attrition. In many cases, there is a single special education teacher in a school building; thus, the social and professional isolation of the special education teacher may be a significant factor in the high attrition rates of younger special education teachers.

Teacher induction programs that are designed to give newly trained teachers professional support and access to assistance with problem-solving may be a cost-effective solution to attrition of younger and less experienced teachers. Austin (1987) found that successful induction programs are characterized by linking a new teacher with an experienced teacher who is in the same field, whose classroom is near the new teacher's classroom, who has common planning time, who has a compatible personality, and who has similar educational philosophies. The resources for induction programs are available in every school, and their implementation could serve to retain newer teachers as well as renew the enthusiasm of experienced teachers.

The relatively young population of special education teachers, as compared with the general education teaching population, deserves special notice. The data clearly show that newly trained teachers have an excellent chance of obtaining employment. There appears to be little competition for jobs from experienced teachers returning to the field in special education. Therefore, teacher training institutions and professional special education organizations should actively recruit prospective teachers into the field of special education.

Attrition rates of teachers with graduate training are significantly lower than the attrition rates of teachers with undergraduate training only. Several factors may have an influence on this finding. Salaries of teachers with graduate training are often much higher than salaries of teachers with undergraduate training. A teacher who has earned a master's degree may also have benefits and/or seniority that may keep him/her in teaching. Finally, teachers who have sought further training may be more committed to teaching and may have acquired skills through further training that make teaching gratifying to them. Consequently, incentive programs for further training may help to reduce attrition rates.

Another finding of this study showed no significant differences in attrition rates among rural and urban teachers. This finding differs with some assumptions about rural attrition.

Attrition: #4
Results of the survey also revealed that a complex set of factors contributed to attrition. Several broad constructs were included in the survey instrument. These components included support by administration and other professionals, parental support and community respect, job conditions (salary, opportunity for advancement, paperwork, vacations, stress, autonomy), management of curriculum and instruction, preparation for teaching, and intrinsic rewards of teaching (student progress, meeting student needs). Although no one variable alone could predict whether a teacher would stay or leave teaching, some factors were highly correlated with teachers who remained. The opportunity to work on and make decisions about curriculum development and implementation was highly correlated with general education teachers’ remaining in teaching. Administrative support, support from other professionals, and the nature of the first teaching experience were correlated with special education teachers’ remaining in teaching. Interestingly, salary was not a factor of the first principal component which accounted for 14% of the variance. Salary appeared to become an issue only when teachers were dissatisfied with other elements of the profession, such as administrative support and administrative feedback on job performance.

The problem of teacher attrition is not simple. A myriad of factors enter into the teacher’s decision to leave teaching. Although no single variable has been identified in this study as a cause of attrition, several factors that lead to attrition have been established: Support from administration, support from parents and other professionals, opportunity for career advancement and curriculum development, and the ability to meet student needs account for the greatest variance. Thus, it becomes clear that improving the teaching career can be accomplished within the profession with the cooperation of teachers and administrators. Salary, paperwork, stress, and time required to prepare for teaching become causes of attrition when teachers do not receive support, are unable to meet student needs, or have little opportunity to work on curriculum.

The solutions to teacher attrition lie in allowing teachers to do what they are trained to do: develop and implement curriculum and instructional methods that meet student needs -- with support and recognition from administrators, colleagues, parents, and the public.

This study was made possible through the cooperation of the Wisconsin Department of Public Instruction (which provided the computer databases used in this study), Marquette University-Milwaukee, the University of Wisconsin-Whitewater, and a U.S. Department of Education grant.

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Attrition: #4
December 1988