

DOCUMENT RESUME

ED 397 579

EC 304 907

AUTHOR Wald, Judy L.
 TITLE Culturally and Linguistically Diverse Professionals in Special Education: A Demographic Analysis.
 INSTITUTION National Clearinghouse for Professions in Special Education, Reston, VA.
 SPONS AGENCY Special Education Programs (ED/OSERS), Washington, DC.
 REPORT NO ISBN-0-86586-285-0
 PUB DATE 96
 CONTRACT H030E30002
 NOTE 35p.
 AVAILABLE FROM National Clearinghouse for Professions in Special Education, Council for Exceptional Children, 1920 Association Drive, Reston, VA 20191-1589.
 PUB TYPE Reports - Evaluative/Feasibility (142) -- Information Analyses (070)

EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS Academic Persistence; *Cultural Differences; Data Collection; *Disabilities; Educational Policy; Elementary Secondary Education; Futures (of Society); Higher Education; Minority Group Children; *Minority Group Teachers; Preservice Teacher Education; School Demography; *Special Education Teachers; Teacher Recruitment; *Teacher Supply and Demand
 IDENTIFIERS *Diversity (Faculty)

ABSTRACT

This paper identifies issues associated with the supply and demand of culturally and linguistically diverse teaching professionals, particularly special educators. It notes an alarming disparity between the supply and the demand of special education teaching professionals representing diverse populations. First, data on general and special education demographics are provided. Definitional issues are briefly addressed, noting that a "minority" may well actually be the majority in some school systems. The critical importance of population projection data in addressing the supply and demand of culturally and linguistically diverse special educators is stressed. The scarcity of relevant data and the importance of data collection in providing an empirical basis for policy decisions are stressed. Variables related to the imbalance between the supply of minority educators and the number of minority students are presented in graphs, tables, and narrative, including alternative career paths, diminished supply of special education personnel, low preservice graduation rates of minority students, and attrition/retention issues. The value of diversity within the educational setting is emphasized. Recommendations address: programs directed toward increased supply of educators representing diverse populations; recruitment and retention efforts at the preservice level; federal mandates; and systematic review and evaluation using national, state, and regional data collection. Appended is a bibliography that lists publications that contain data on the supply of and demand for personnel from minority groups in special education, general education, and higher education; information on trends concerning minority personnel in the teaching force; and demographic data that may influence the supply of and demand for personnel from minority groups in education in the future. (Contains 45 references.) (DB)

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Culturally and Linguistically Diverse Professionals in Special Education:

A Demographic Analysis

Judy L. Wald

National
Clearinghouse
for
Professions
in *Special Education*

The Council for Exceptional Children

**Culturally and
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A Demographic Analysis

**Judy L. Wald, Ph.D.
Research Associate**

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ISBN 0-86586-285-0

Published in 1996 by the National Clearinghouse for Professions in Special Education, 1920 Association Drive, Reston, Virginia 22091-1589.

This product is made possible through Cooperative Agreement # H030E30002 between the U.S. Department of Education, Office of Special Education Programs, and The Council for Exceptional Children. The contents of this publication do not necessarily reflect the views or policies of the Department of Education. This information is in the public domain unless otherwise indicated. Readers are encouraged to copy and share it, but please credit the National Clearinghouse for Professions in Special Education.

Printed in the United States of America

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Acknowledgments

I would like to thank my colleagues at the National Clearinghouse for Professions in Special Education at The Council for Exceptional Children. Their guidance and encouragement supported me throughout this project. I would also like to thank the following individuals for their help and editorial assistance in the publication of this product.

Martha Bokee

Project Officer for National Clearinghouse for Professions in Special Education, Office of Special Education Programs, U.S. Department of Education

Norma Ewing

Southern Illinois University at Carbondale

Ed McCaul

Networking System for Training Education Personnel

Shelia Mingo

Office of Ethnic and Minority Concerns, The Council for Exceptional Children

James Patton

The College of William and Mary

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1995 Teacher of the Year, The Council for Exceptional Children

Judy Smith-Davis

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We live and work in a pluralistic society. Because of the changing demographics associated with both students and teachers, we need to reassess diversity issues in our schools, particularly the supply and demand of education professionals. Researchers purport that our nation's teaching force has undergone a "cultural homogenization" (Alston, 1988, p. 1; Zimpher & Ashburn, 1992). This homogeneity is evident despite the cultural heterogeneity of students.

Data compiled by the American Association of Colleges for Teacher Education (AACTE, 1994) revealed the ethnic breakdown of students in public elementary and secondary schools (Table 1). These figures, which include special education enrollment, show 68% white, 16% black, and 12% Hispanic students. In another study, the National Center for Education Statistics (NCES; Choy, Henke, Alt, Medrich, Bobbitt, 1993) compared the ethnic distribution of teachers to that of students in all U.S. educational environments (Figure 1). This report, "Schools and Staffing in the United States: 1990-91," indicated that 13.5% of the U.S. teaching force was composed of people of color, whereas 31.4% of all students represented diverse populations. This apparent disparity between the cultural representativeness of educators and students is at the heart of the supply-and-demand issue, including special education. *Researchers predict that by the year 2000, the teaching work force will overwhelmingly be composed of educators who are white and female* (Hawkins, 1994).

This paper focuses on identifying some of the underlying issues associated with the supply and demand of culturally and linguistically diverse teaching professionals — particularly special educators representing diverse populations. The target of this paper is upon the special education teaching profession, although the issues discussed may also apply to related service professions such as physical therapy, occupational therapy, and speech-language pathology. We examine some of the underlying issues and precipitating factors associated with supply and demand of diverse professionals; but we do not intend to suggest that these factors are exclusive, causative agents of disparities apparent in the data. Finally, we discuss the implications of the data and recommend directions for future research and analysis.

The data in this paper are presented in an organizational schema that progresses from a description of general education demographics to data unique to special education. Analogous to a funnel, the data depicted are initially presented in a general context and then narrow to the field of special education as information is introduced. An examination of data pertinent to general education, higher education enrollment, enrollment in preservice preparation programs, and ultimately, those statistics related to special education provides the reader with a comprehensive picture of the pervasiveness of this issue.

The apparent disparity between the cultural representativeness of educators and students is at the heart of the supply-and-demand issue, including special education.

TABLE 1
Enrollment in Public Elementary and Secondary Schools, by Race/Ethnicity, 1990

<i>Race/Ethnicity</i>	<i>N</i>	<i>%</i>
White	27,719,311	68.0%
Black	6,614,471	16.0%
Hispanic	4,714,221	12.0%
Asian/Pacific Islander	1,379,231	3.0%
American Indian/Alaskan Native	409,342	-----
Total	40,836,576	100.0

Source: American Association of Colleges for Teacher Education. (1994). Teacher Education Pipeline III: Schools, Colleges, and Department of Education Enrollments by Race, Ethnicity, and Gender. Washington, DC: Author.

Some of the groups encompassed by the term *minority* are often the majority in some school systems. Consequently, the term is a misrepresentation of true demographics.

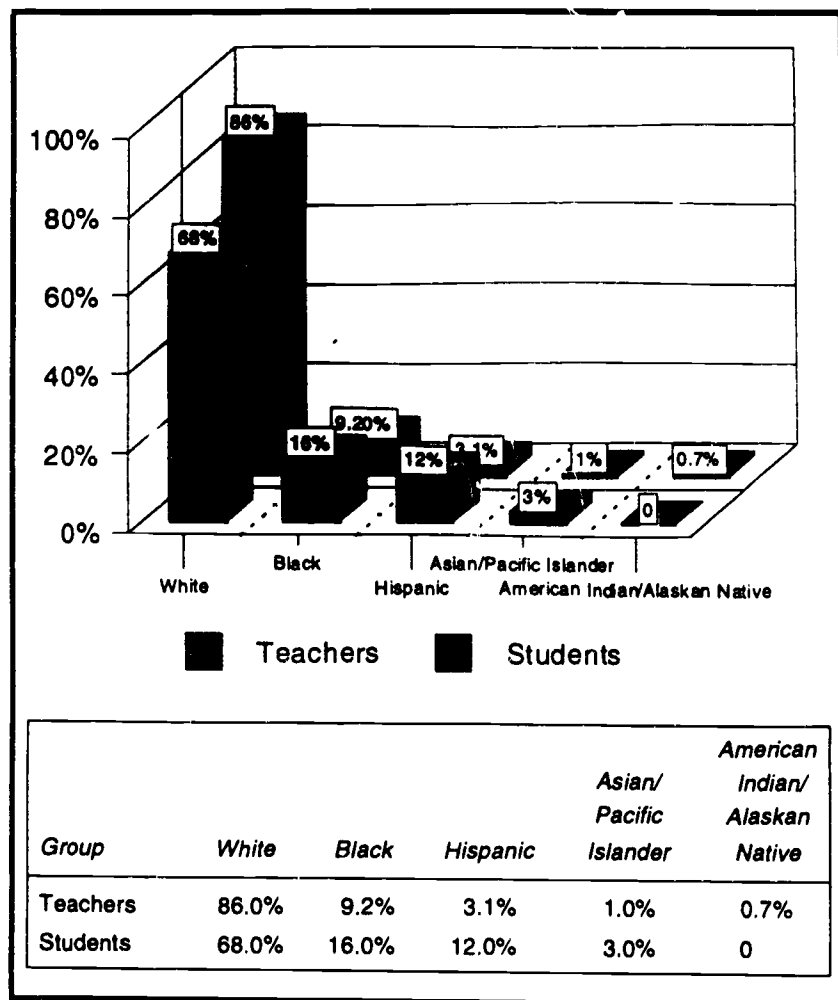
Definition

Research on the topic of supply and demand of diverse populations within the teaching profession has used an array of terms to depict various racial/ethnic groups. Writers have often interchangeably used expressions such as *minority populations*, *culturally and linguistically diverse*, and *students of color* to represent people of varying colors, classes, and cultures (MacCalla, 1992). Researchers have often focused their studies on specific groups such as African Americans, Native Americans, Hispanics, and Asian Americans; and the term *minority* is used to represent these diverse groups.

King (1993) voiced the concern that the use of the term *minority* throughout literary references presents several limitations. First, some of the groups encompassed by the term *minority* are often the majority in some school systems. Consequently, the term is a misrepresentation of true demographics. Second, sometimes people use the term in a demeaning fashion to reference a particular group. King has provided evidence substantiating the negative connotation associated with the term, through subjective feedback from individuals representative of these diverse populations who objected to the use of the term as an identifier.

In this article, the terminology used is consistent with the research material from which the information was obtained. The variability in the terms used throughout this paper reflects the divergent perspectives encompassing this field.

FIGURE 1
Demographic Information for Students and Teachers
in All Educational Settings



Source: American Association of Colleges for Teacher Education. (1994). *Teacher Education Pipeline III: Schools, Colleges, and Department of Education Enrollments by Race, Ethnicity, and Gender*. Washington, DC: Author.

Scope of Issue

Our society is becoming increasingly multicultural and multiethnic (Alston, 1988). Consequently, all students need role models to facilitate the belief that representatives of diverse populations are and can be successful ("Diversifying Our Great City School Teachers," 1993; Hill,

Population projection data are integral to the development of strategies related to addressing the problem associated with the supply and demand of culturally and linguistically diverse personnel in special education teaching professions.

Carjuzaa, Aramburo, & Baca, 1993; King, 1993; Williams, 1992). Teacher education programs play an important role in preparing educators who are cognizant of cultural differences. Personnel preparation heightens the skills of future teachers in the area of cultural diversity. These skills will, in turn, facilitate the personal growth and enhance the quality of education for students representing diverse backgrounds (Ewing, 1995). Researchers have purported that a monocultural U.S. society is a thing of the past (Hill et al., 1993) and have recommended that our children have exposure to a variety of cultural experiences to facilitate their appreciation of cultural diversity. The issue of supply and demand is related to many variables within the educational, social, and labor sectors (Smith-Davis & Billingsley, 1993). The topic cannot be addressed in isolation from its varying components. Instead, we need to consider a holistic framework, including sociocultural and educational parameters.

The pervasive nature of this issue, including its geographic impact, warrants discussion. By the year 2010, 12 states will have significant minority youth populations (Hodgkinson, 1992, p. 11). The states, plus the District of Columbia, are as follows: Hawaii, Texas, California, Florida, New York, Louisiana, Mississippi, New Jersey, Maryland, Illinois, and South Carolina. Hodgkinson (1992) suggested that over the next 20 years, states will become more dissimilar in terms of ethnic diversity. The varying geographic impact of cultural and linguistic diversity plays a key role in personnel preparation planning. Population projection data are integral to the development of strategies related to addressing the problem associated with the supply and demand of culturally and linguistically diverse personnel in special education professions.

Some researchers contend that general and special educators have failed African-American students (Artiles & Trent, 1994; Ewing, 1995). Researchers cite the areas of identification, assessment, placement in the least restrictive environment, individualized education instruction, and adaptation to change and reform, as adversely impacting the educational needs of diverse students (Obiakor, 1994). This failure of the educational system is often reflected in research pertinent to the disproportionate representation of minority students in special education classrooms (Artiles & Trent, 1994; Ewing, 1995; Harry, 1994; Voltz, 1995). The cultural differences exhibited by students results in varying learning styles and preferences that may predispose students to fail in classroom environments that do not recognize these differences (Voltz, 1995). Researchers encourage the examination of the sociocultural climate, including racial/cultural prejudice in the learning environment. Although the issue of over-representativeness of minority populations in special education is beyond the scope of this paper, the collection and use of data and information pertinent to this problem is recommended to more fully understand the issue of diversity within the special education teaching profession (Harry, 1994).

The Data

Figure 2 shows that the ethnic demographics associated with special and general education teaching professionals are similar (Cook & Boe, 1995). This correspondence, however, does not minimize the disparity that exists between the number of *educators* representing diverse populations and the number of *students* representing these same populations. Consequently, much of the data depicted in research — including this paper — is abstracted from numerical information associated with general education. For data related to the supply and demand of education professionals, we have relied on resources such as the “Schools and Staffing Survey of 1990-91” (Choy et al., 1993), data from the National Center for Education Statistics (Morgan & Broyles, 1994) related to institutions of higher education based on 1991-92 data, and the Teacher Education Pipeline III (AACTE, 1994). For information related to the supply of professionals representing diverse populations within the realm of special education, we have relied on data emanating from the *Seventeenth Annual Report to Congress* (U.S. Department of Education, 1994).

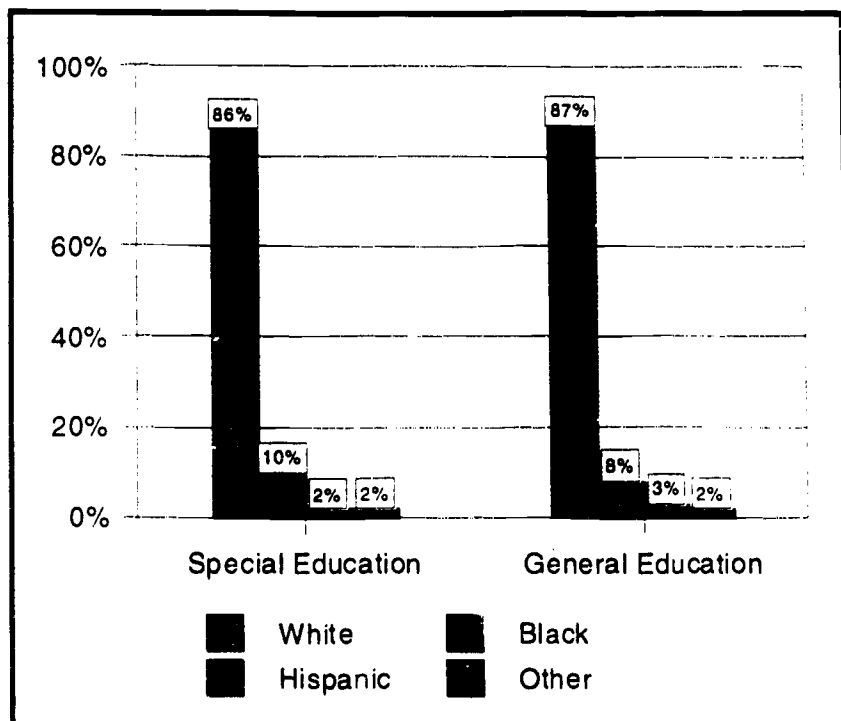
Despite the scarcity of special education data, we have found that even this limited information can facilitate awareness regarding the severity of the supply-and-demand problem associated with professionals representing diverse populations. In fact, data collection is important to provide an empirical basis from which policy decisions can emanate (Education Commission of the States, ECS, 1990). In any quantitative analysis using supply-and-demand data, however, we must acknowledge the limitations of the information. To make inferences regarding quantitative information, a researcher should have an understanding of the sampling procedures utilized, and the way in which variables are defined (Borg & Gall, 1989). Unquestionably, numerical and statistical information can be misleading because of problems associated with data collection and reporting (Smith-Davis & Billingsley, 1993). If we are aware of the limitations of such data, however, we can use these data to complement substantive discussion. This discussion can lay the groundwork for addressing the problem of supply and demand of special education personnel representing diverse populations.

Related Variables

As mentioned earlier, researchers have found an imbalance between the supply of minority educators and the number of minority students in U.S. schools (“Diversifying Our Great City School Teachers,” 1993; Williams, 1992). In supply-and-demand research in education, writers often use the term *educational pipeline* (AACTE, 1994; Hill et al., 1993; MacCalla, 1992). The “pipeline” refers to the conduit that leads a person to make the

Data collection is important to provide an empirical basis from which policy decisions can emanate.

FIGURE 2
Ethnic Demographic Characteristics of Special Education and General Education Teachers



Source: Cook, L. H., & Boe, E. E. (1995). Who is teaching students with disabilities? *TEACHING Exceptional Children*, 28(1), 70-72.

career decision to seek preservice education and employment within the realm of an educational discipline, such as special education. Along this path are variables that positively or negatively affect one's ultimate movement into the educational field. Many intrinsic and extrinsic factors affect people's vocational decisions in varying ways, depending on the unique characteristics of each person. These variables include alternate career paths, diminished supply of candidates, and low graduation rates.

Alternative Career Paths

Many individuals representing minority populations do not consider teaching as a career because of the lure of alternate, often more lucrative careers (Alston, 1988; Betty, 1990; King, 1993). Many industries have the economic resources to implement rigorous recruitment programs targeted toward people representing diverse populations. These same industries may be more lucrative for employees once they are on the job. Consequently, many people do not have a favorable view of the teaching profession as a career choice.

Diminished Supply

We may view the increased demand for special education personnel representing diverse populations as a result of the diminished supply of these professionals entering the profession. The "demand" data vary, however, because of the unique demographics associated with each geographical region of the United States (Smith-Davis & Billingsley, 1993). Some potential candidates may never even enter the pipeline because of socioeconomic variables such as poverty. (Hill et al., 1993). College participation by minority youth continues to be below the average for nonminority students. In 1989, approximately 11% of students enrolled in schools, colleges, and departments of education represented diverse populations ("Diversifying Our Great City School Teachers," 1993). Overall, in 1993, 41.8% of white high school graduates attended college, compared to only 32.8% of black high school graduates ("Graduation Rate Rises," 1994). Standardized tests, including admissions and certification exams, have continued to have a disparate effect on students from diverse populations (Alston, 1988). These variables have negatively affected the number of nonwhite students who are enrolling in postsecondary educational programs and thus have reduced the overall supply of potential personnel for the education sector.

Low Preservice Graduation Rates

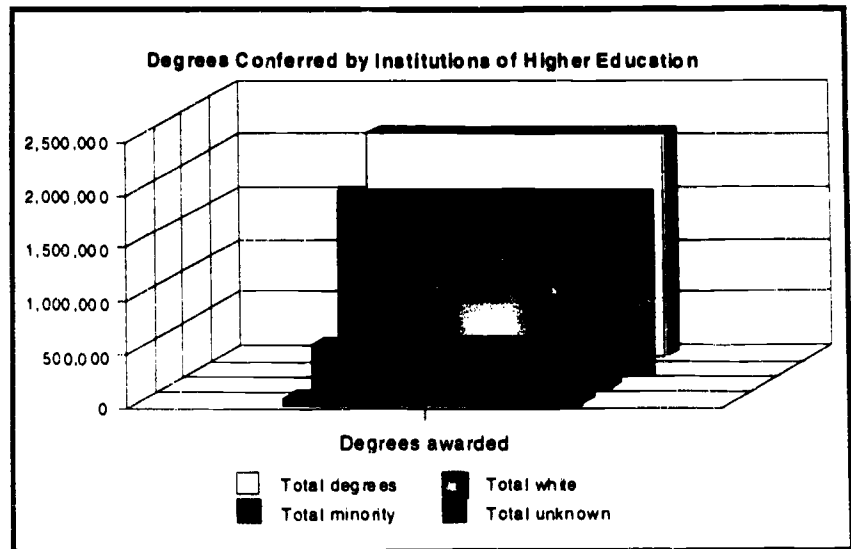
Researchers have found that several factors influence a minority student's decision to stay in a preservice program at a college or university (Bell & Cross, 1992; Betty, 1990; Smith-Davis & Billingsley, 1993). Research has substantiated that minority students report a sense of alienation in the higher education setting (Bolden & Doston, 1992). This alienation is compounded by episodes of racism and discrimination that further push the preservice student away from the higher education community and thus away from graduation.

Figure 3 shows that in 1991-92, the number of minority preservice students graduating from institutions of higher education (IHEs) in all disciplines was approximately 14% of the total number of students who graduated (Morgan & Broyles, 1994). Table 2 shows the specific ethnic breakdown of the degrees conferred by IHEs.

Concurrently, within the domain of special education, approximately 28,411 students were enrolled in undergraduate programs in colleges and universities (AACTE, 1994) (see Figure 4). At the same time, approximately 17,674 degrees were conferred in special education (Morgan & Broyles, 1994). If the percentage of minority students who received degrees in all fields in 1991-92 (14%) is applied to special education graduates, the number of minority students graduating in special education would be approximately 2,474. Data reported in the *Seventeenth Annual Report to Congress* indicated that the number of qualified special education teachers

The "demand" data on special education personnel representing diverse populations vary because of the unique demographics associated with each geographical region of the United States.

FIGURE 3
Degrees Conferred by Institutions of Higher Education, 1991-92



Source: Morgan, F., & Broyles, S. (1994). *Degrees and other awards conferred by institutions of higher education: 1991-92*. Washington, DC: National Center for Education Statistics.

The number of preservice students representing diverse populations who graduate from special education undergraduate programs may be lower than the overall 14% that graduate from all programs.

needed to fill vacant positions or professionals needed to assume positions held by uncertified individuals was approximately 25,829. The gap between qualified special education graduates and the labor market need for these professionals grows as one considers the career choice patterns of young adults. As we have previously shown, the number of people who ultimately enter the special education teaching profession may be lower than the number of students who actually graduate from preservice special education curriculums because of attrition from college programs. Thus, the number of preservice students representing diverse populations who graduate from special education undergraduate programs may be lower than the overall 14% that graduate from all programs.

In addition, although a preservice student may graduate from a postsecondary institution with a degree in special education, this student may not enter the special education teaching profession (Lankard, 1994). The appeal of alternate career paths even after a preservice student has graduated from a special education program is still a threat to the supply of potential, qualified special education personnel (King, 1993).

Table 2
Degrees Conferred by Institutions of Higher Education
by Race/Ethnicity and Degree Level

<i>Degree</i>	<i>Total</i>	<i>White</i>	<i>Black</i>	<i>Hispanic</i>	<i>Asian</i>	<i>American Indian</i>	<i>Non-resident</i>	<i>Un-known</i>
Associate's	504,231	388,038	38,673	26,118	15,158	3,873	7,989	19,614
Bachelor's	1,136,553	921,432	71,223	40,251	46,459	5,128	28,467	22,189
Master's	352,838	257,052	17,379	9,050	12,289	1,221	39,644	15,504
Doctor's	40,659	25,301	1,202	798	1,545	118	10,649	976
First Professional	74,146	59,866	3,568	2,820	4,757	294	1342	1,155

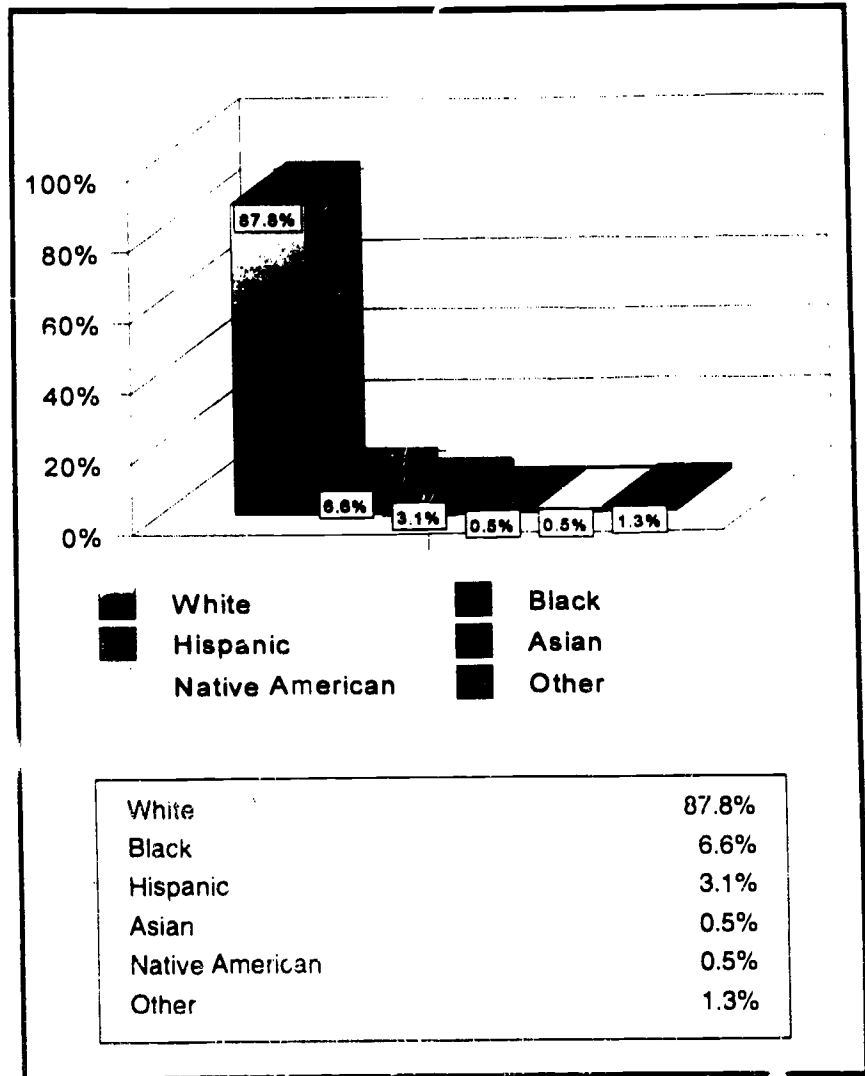
Source: Morgan, F., & Broyles, S. (1994). *Degrees and other awards conferred by institutions of higher education: 1991-92*. Washington, DC: National Center for Education Statistics.

An additional barrier that may preclude preservice preparation program graduates from securing special education teaching positions is the inability to pass state certification procedures or pass licensure exams (Carter, 1992; Hawkins, 1993). In a study conducted by Gordon (1994), approximately one eighth of 140 respondents interviewed indicated that the additional educational requirements necessary for certification precluded their career decision to enter the teaching profession. Additionally, an assessment of state data regarding passing rates on the National Teachers' Examination (NTE) has confirmed the disproportionate number of culturally and linguistically diverse students who do not pass this examination (Bell & Morank, 1986). Although criteria for passing the examination are determined at the state level and, therefore, specific cut-off points for passing may vary widely, national data are available through the *NTE Programs Annual Report* (Bianchini, Kimble, Pitcher, Sullivan, & Wright, 1995), published by Educational Testing Service (ETS).

ETS collected data related to the NTE administration in the specialty area of special education from October 1992 to September 1993. These statistics indicated that the overall mean score of all students who took the examination was 612 out of a range of 250 to 990. White, non-His-

In one study, some respondents indicated that the additional educational requirements necessary for certification precluded their entering the teaching profession.

FIGURE 4
Undergraduate Enrollment in Special Education
Departments by Race/Ethnicity, 1991

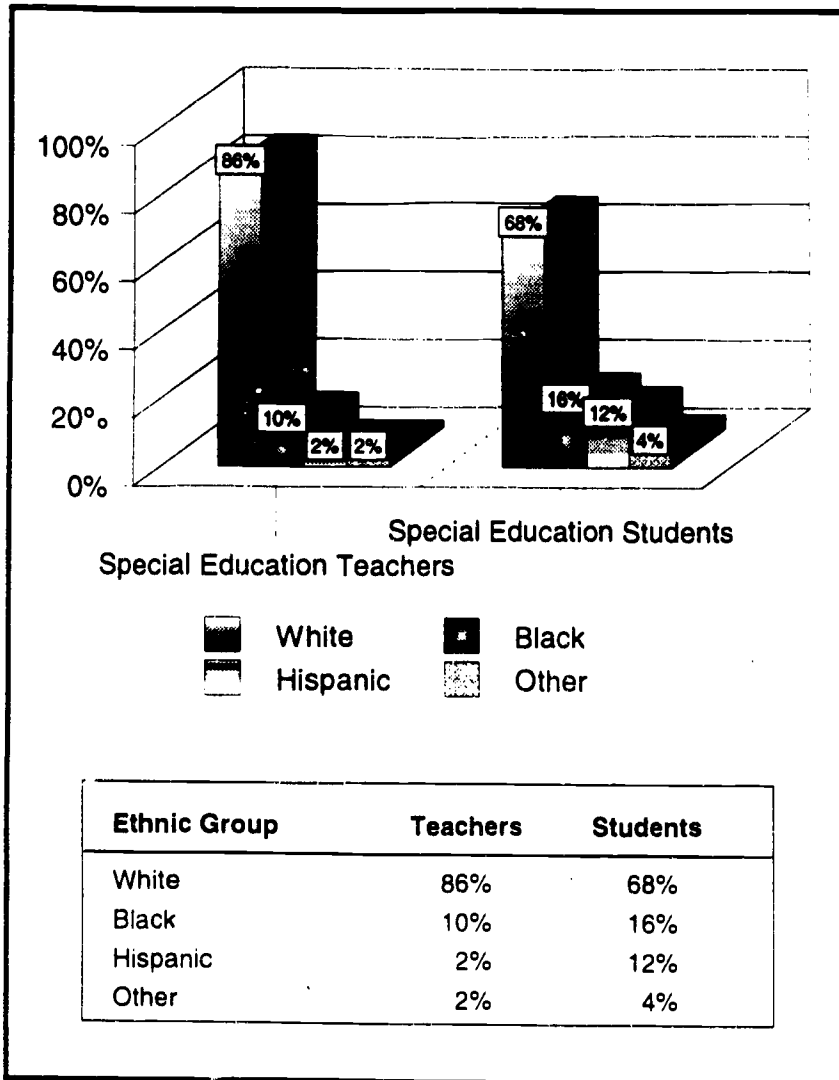


Source: American Association of Colleges for Teacher Education. (1994). *Teacher Education Pipeline III: Schools, Colleges, and Department of Education Enrollments by Race, Ethnicity, and Gender*. Washington, DC: Author.

panic test takers scored an average of 629, whereas mean scores for the special education examination for other test takers were as follows:

- African Americans — 515.
- Mexican Americans — 616.

FIGURE 5
Ethnicity of Special Education Teachers and Students



Source: Cook, L. H., & Boe, E. E. (1995). Who is teaching students with disabilities? *TEACHING Exceptional Children*, 28(1), 70-72.

- Native Americans — 604.
- Pacific Island/Asian Americans — 615.
- Puerto Ricans — 506.
- Other Hispanic or Latin Americans — 615 (Bianchini et al., 1995).

Data pertinent to all educational settings, to degrees conferred, and to enrollment in undergraduate special education teaching programs — all demonstrate the disparity between the supply and the demand of culturally and linguistically diverse teachers and students.

Again, ETS does not establish the passing scores for each state; thus, these data become even more revealing when specific state passing criteria are known.

So far, we have reviewed the data related to the ethnicity of students and teachers in general education, the demographics of college graduates, and the ethnicity of undergraduate students in special education preservice programs. The next part of this picture is an examination of the ethnicity of special education teaching professionals and special education students in public educational settings. Such an analysis is a critical step in understanding the supply-and-demand problem.

Figure 5 compares the ethnic and racial composition of special education teachers and students in public schools. The supply of special education teaching professionals representing diverse populations is about 14%, whereas the percentage of students in special education programs representing diverse populations is about 32%. Figure 5 provides further evidence that the issues associated with the supply and demand of teaching professionals representing diverse populations warrant consideration in administrative and policy decisions within educational settings.

Data pertinent to all educational settings (Table 1, Figure 1), data related to degrees conferred by IHEs (Figure 2, Table 2), and enrollment in undergraduate special education teaching programs (Figure 4) all demonstrate the disparity between the supply and the demand of culturally and linguistically diverse teachers and students. The data presented in Figure 5 — the true picture of the racial and ethnic distribution in today's special education classrooms — reflect the same problem evident in general education settings; and the picture is affected by the demographics associated with graduation rates at institutions of higher education.

Although preservice graduation rates appear bleak at institutions of higher education, data regarding graduation rates at Historically Black Colleges and Universities (HBCUs) do not appear as dismal (Hawkins, 1994). HBCUs have provided minority students access to higher education for over 125 years (Wilson, 1994). Black institutions have provided our nation with role models and have served as a resource for professional leadership. Concurrently, HBCUs have demonstrated a commitment toward academic excellence and have provided students with a venue for academic and social achievement (Wilson, 1994). Overall, approximately 32 percent of all baccalaureate degrees awarded to African Americans between 1986 and 1991, were granted by public Black colleges and universities (Payne, 1994).

Attrition/Retention Issues

Based on data collected in 1992, researchers reported that 41% of the minority teachers polled — but only 25% of nonminority teachers — indicated that they were likely to leave the teaching profession (Poda & Stanley, 1992). This attrition problem among professionals reflecting cultural and ethnic diversity is particularly acute in urban, inner-city areas, where the majority of students representing diverse populations reside (Williams, 1992).

Teacher characteristics that influence an educator's decision to remain within the profession occur at the micro-system level (Brownell & Smith, 1993). Variables such as educational preparation, initial commitment, personal views of efficacy, coping strategies, and perceived career opportunities affect a teacher's decision to stay in the special education classroom or leave it.

Extrinsic variables that affect an educator's decision to stay in the teaching profession include administrative support, role design, stress experienced at work, and personal job satisfaction (Cross & Billingsley, 1994). The ecosystem in which the educator works can greatly affect attrition and retention. Administrators and school personnel can manipulate these extrinsic variables to facilitate a workplace in which teachers are empowered, thus enhancing overall job satisfaction. According to Cross and Billingsley (1994), these variables, more than any other, have the greatest impact on an individual's intent to stay in teaching.

Implications of Data

Undoubtedly, the data presented in the preceding sections have substantiated the disparity between the supply and the demand of special education teaching professionals representing diverse populations. This problem is prevalent in all educational environments, including the general education domain. This disparity is evident not only within the professional environment, but within undergraduate preservice training programs, and is ultimately reflected in student graduation rates from institutions of higher education.

In response to these alarming data, national, state, and institutional administrators have responded with aggressive recruitment and retention programs (ECS, 1990; Hill et al., 1993). If these programming efforts are to have a positive impact on the supply-and-demand problem, however,

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administrators and educators must examine their attitudes toward people from diverse cultures and ethnic groups (Gonzalez, 1992). Not until attitudinal barriers are broken can we have effective programs directed toward increasing the representation of diverse populations in the special education teaching profession. Projections indicate that, by the year 2010, the United States will experience a 4.4-million increase in the number of nonwhite youth, age 0-17 years (Hodgkinson, 1992). In states such as California, Florida, and Texas, over 50% of the youth population will be nonwhite in the year 2010. In these states, however, only 19% of the teaching force will represent diverse populations (Hodgkinson, 1992).

Although more nonwhite youth are graduating from high school ("Graduation Rate Rises," 1994), the majority of these students are not choosing postsecondary education. With an increase in youth representing diverse populations, early exposure to careers in special education becomes even more important. Young people make career decisions and develop self-concept as workers early in life (Szymanski, Turner, & Hershenson, 1992). Career development activities directed early in life can be effective in facilitating young people's vocational choices.

In the *Careers in Teaching Handbook*, published by the Recruiting New Teachers Organization (Haselkorn & Calkins, 1993), David Imig, Executive Director of the American Association of Colleges for Teacher Education, presents suggestions to help prospective educators learn more about the teaching profession and to help prepare them for teacher education programs. Imig recommends that prospective educators get involved with children through tutoring and structured forums such as churches or synagogues. Also recommended is learning about educational settings through observation and talking with school professionals. Interviews and onsite vocational exploration are particularly important because of the scarcity of culturally relevant occupational literature (Rodriguez, 1994). Exposing students to role models who represent various vocations and providing students with realistic and culturally sensitive vocational information (Rodriguez, 1994) is important in motivating students to explore a wider range of careers. Through this exploration, there is the potential that students will enter a career path they previously had not been considered.

Value of Diversity

Diversity within an educational setting has important implications for the classroom climate. The learning environment is critical in facilitating student success (Voltz, 1995). Factors associated with classroom climate include teacher attitudes (Ewing, 1995) and the impact that these attitudes have on a student's self-concept and sense of belonging (Obiakor, 1995). Attitudes can impact upon the achievement expectations that teachers have

for students in their classes. The notion of the self-fulfilling prophecy, whereby, educators unintentionally create qualities in students based upon labels and personal attributes, may adversely impede student performance (Voltz, 1995). Enlightened, culturally sensitive educators can help to transform the school environment, making it a better place for all students, including those who represent culturally or linguistically diverse backgrounds (Ewing, 1995).

Student learning can be enhanced through an educator's awareness and knowledge of cultural differences. The value of culture in facilitating educational achievement cannot be minimized (Ewing, 1995). Knowledge of such things as communication styles, cognitive orientations, and societal norms for a particular cultural or ethnic group (Garicia & Malkin, 1993) can enhance the learning approaches that an educator can take in the classroom. A teaching professional who is cognizant of these cultural distinctions and can appreciate their impact upon a student's acquisition of information, can better develop curriculums and learning materials that are congruent with the instructional needs of students. Researchers contend that educators should have a heightened regard and authentic knowledge of various cultures and a greater understanding of the impact of cultural variances upon student behavior (Ewing, 1995).

The value of cultural diversity within our nation's education profession impacts upon many facets of the educational environment. Ewing (1995) indicated that a diverse teaching force may reduce the occurrence of mislabeling that can lead to the overrepresentation of minority students in special education placements. Further, an increase in the number of culturally diverse teaching professionals can facilitate cross-cultural understanding in the classroom, provide collaboration with European-American colleagues, and facilitate a positive school climate that is consistent with the needs of students of color. Cultural diversity and the deliberate efforts to facilitate interest in special education teaching professions by culturally and linguistically diverse professionals adds value to the classroom environment. More important is the value to the educators and students who are stakeholders in the educational setting.

Recommendations

Programs directed toward increasing the supply of qualified educators representing diverse populations must permeate national, state, and local educational policy. The "pipeline" needs to be repaired at all points (Hill et al., 1993). At the societal level, we must recognize that the shortage of qualified, special education professionals representing diverse populations is an acute problem. Policymakers must reassess the imbalance between the monocultural nature of our teaching personnel and the heterogeneous

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nature of our students. Future action plans must include the following tenets: (a) the will to succeed, (b) the inclusion of a well-planned and diversified range of strategies, and (c) commitment to long-term implementation (Hill et al., 1993).

At the preservice point of the conduit, recruitment and retention efforts should assess variables such as (a) financial aid, (b) teacher preparation methods, (c) recruiting from nontraditional groups such as teacher aides and parents, (d) financial compensation, (e) facilitating teacher involvement in school decision making, and (f) providing professional development opportunities (Williams, 1992). At the institutional level, administrators of teacher preparation programs must detail their long- and short-range goals pertinent to the recruitment and retention of teachers representing diverse populations (Alston, 1988) and promote a sense of community within the educational program (Hill et al., 1993).

Federal mandates for increasing the number of diverse professionals in the special education field are mandated through Section 610 of the Individuals with Disabilities Education Act (IDEA; P. L. 101-476). In this section, Congress outlined the reasoning behind why the Federal Government must become responsive to an increasingly diverse society. Rationale includes a changing racial profile, issues related to the high percentage of minority youth in urban educational settings, and the increased number of limited English proficient students. Section 610 identifies that recruitment efforts at the preservice, continuing education, and practice levels are necessary to achieve the goal of bringing a larger number of minorities into the profession.

However, all educational constituents are stakeholders in this issue and should be involved in carrying out this initiative. Policy makers, fiscal allocators, program planners, parents, and administrators at the national, state, and local levels should be involved in this collaborative effort.

Educators must incorporate systematic review and evaluation of programs into everyday practice and thought, using national, state, and regional data collection to complement evaluation methodologies. Acquiring both qualitative and quantitative data will ensure that assessment methodologies are exhaustive in their approach. Considering the severity of the problem, we need an encompassing framework toward addressing the issue of supply and demand of special education personnel representing diverse populations. A comprehensive, collaborative, and coordinated planning effort, in conjunction with an adequate allocation of human and financial resources (Hill et al., 1993), is commensurate with this framework. Ultimately, this framework should reflect a reorientation in attitudes and philosophy concerning the supply and demand of special education personnel representing diverse populations.

Why is a reorientation in attitudes and philosophy so important? Attitudes and values shape the way that professionals behave in a variety of situations (Bradley, Kallick, & Regan, 1991). Attitudes influence behavior and facilitate patterns of interaction in organizational environments. The social climate of the classroom is a critical variable in facilitating student success (Voltz, 1995), and attitudes play an important role in influencing this climate. Participants in the development, administration, and implementation of special education programs and those involved in the delivery of special education services should value diversity. This valuation can be evidenced by positive attitude change and a philosophical reorientation. We all must be "responsive to the growing needs of an increasingly more diverse society" (IDEA, Section 610) and should actively and purposefully engage in activities that demonstrate this responsiveness.

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This bibliography lists publications that contain data on the supply of and demand for personnel from minority groups in special education, general education, and higher education; information on trends concerning minority personnel in the teaching force; and, demographic data that may influence the supply of and demand for personnel from minority groups in education in the future. Although every attempt has been made to include the most current citations, this is not an exhaustive list. We invite readers to send us current citations for inclusion.

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3/96 updated

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ISBN 0-86586-285-0

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