

**A QUESTION OF EFFECTIVENESS:
RECRUITMENT OF SPECIAL EDUCATORS WITHIN HIGH SCHOOL PEER SUPPORT
GROUPS**

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The present study combines information about support groups for students with disabilities from 187 East Texas high schools with explanatory variables taken from data of the Texas Education Agency Academic Excellence Indicator System. This study is a tangential section of a larger study on the influence of peer support groups in East Texas (Zascavage, Schroeder & Armstrong, in print 2008). Our primary goal was to refine our special education recruitment focus using statistical determinants on peer support activities for students with disabilities in East Texas based on the demographic characteristics of the school districts most likely to have peer support. Based on the field literature position that peer support groups would be effective recruitment pools, the analysis investigated variables in a given school district with the purpose of determining which of these variables would influence future recruitment drives and funding allocations. Since teacher shortages are often location specific and requires innovative local solutions (Allen, 2005), what works one place may not be effective in another location. However, peer support groups are present or absent throughout the US, lending this study very likely to reflect the situations in many school districts. At this time, there are very few adequate empirical studies on the effectiveness of special education recruitment (Allen, 2005). Our study presents one possible cost effective, pro-active premise to impact local special education recruitment, the local determination of the presence or absence of peer support groups for students with disabilities.

The teacher shortage in the United States of America is a complicated balance of supply and demand (American Association for Employment in Education, 2004; Boe, 2006). Within this balance, *special education* contains some of the most severe deficits (American Association for Employment in Education, 2000; Center on Personnel Studies in Special Education, 2004; National Education Association, 2001; Katsiyannis, Zhang, & Conroy, 2003; McLeskey, Tyler, & Flippin, 2004), deficits that are particularly severe in inner city and poverty areas (Rosen, 2007).

For every ten positions available, less than nine special educators are graduating from college (Boe, 2006). This has caused the present shortfall of about 47,000 certified special-education teachers. With the pressure on the states to provide both appropriate and adequate education for students with special needs and the increase of students from lower socio-economic situations (SES), analysts expect that the per-pupil cost of special education will increase (Murray, Rueben, & Rosenberg, 2007, p.346).

In addition to the shortage of teachers initially trained in the field, special educators have a high rate of attrition (Billingsley, 2004). Currently state and local agencies employ recruiting strategies such as college

scholarships, tax credits, and loan forgiveness to attract general education teachers to the field (McLeskey, Tyler, & Flippin, 2004; Tyler, Cantou-Clarke, Easterling, & Klepper, 2003; Maryland Department of Education, 2006). Schools districts encounter a challenge as they try to meet the needs of students while maintaining a highly qualified teaching staff. Strategies suggested to increase the supply of special educators include increasing transfers of general education teachers into special education and expanding teacher preparation programs (Boe, 2006). Many school districts are attempting to *grow their own* teaching staff, focusing their recruitment efforts locally and adding financial support for general educators to gain licensure in special education. Other districts are grooming effective paraprofessionals, providing release time, and financial incentives for them to complete their degrees in special education (Thorton, Peltier, & Medina, 2007). Yet, rarely are the siblings and high school peers looked to as a cherished vested group of potential special educators. This study examines the role high student peer support groups can have in recruiting future special educators. We contend that when addressing emergency educational needs, identification of potential special educators becomes the fundamental first step in an effective recruitment strategy (International Institute for Educational Planning, 2006).

High school students who participate in peer support groups for students with special needs constitute an efficient, logical first step target population for recruitment efforts (Ward, Well, & Fernandez, 2001; Darling-Hammond & Sykes, 2003.). Crutchfield (1997) citing a study by Brownell, Smith, Mc Nellis & Lenk, (1995) states, *Not surprisingly many special educators had some meaningful contact with a person with a disability as they were growing up- a sibling, a neighbor, friend or maybe they worked in a summer camp for children with disabilities* (p.3). Meaningful contact might well include annual participation in Special Olympics, Circle of Friends, or Best Buddies. Teacher Cadet or Pro-Team programs also introduce middle school and high school students to careers in education, careers that include a choice of special education (Center for Educator Recruitment, Retention and Advancement in South Carolina, 2007). These identified groups should be the focus of a national special education recruitment effort.

According to the National Clearinghouse for Professions in Special Education and Related Services (NCPSE) *34 Activities to Promote Careers in Special Education* (1996) to increase recruitment, the visibility of, and attitudes towards, individuals with disabilities must improve. Increased visibility is accomplished through the formation of peer tutoring groups such as PALS (Maheady, Mallette, & Harper, 2006), social support groups such as Best Buddies (Copeland, McCall, Williams, Guth, Carter, Presley, Fowler, & Hughes, 2002), Circle of Friends (Whitaker, Barratt, Potter, & Thomas, 1998) and service volunteer work for the Special Olympics (Storey, Stern, & Parker, 1990). These student support groups should become actively involved in community activities within high schools in order to promote special education as a *rewarding opportunity to relate to children and youth with special needs* (NCPSE, p. 1). A visible presence includes project staff recruitment efforts focused in local organizations and high schools where potential recruits can be found (Tyler, Cantou-Clarke, Easterling, & Klepper 2003).

A more recent study analyzed the recruitment focus of eight Southwestern universities. Data analyses compared the perceived importance of activities for individuals who started as special education majors and those that transferred into the major after their sophomore year at the university. Both groups of respondents indicated that contact with a person with a disability was their most important career choice determinant. Participation in peer support groups for individuals with disabilities was determined by both groups as the second most important factor in their choice of a special education teaching major (Zascavage, Schroeder-Stewart, Armstrong, Marrs-Butler, Winterman, & Zascavage, in print 2008) .

The National Clearinghouse for Professions Information Center (NCPIC, 1991) contends that long-term recruitment strategies for the field of special education must provide high school students with meaningful experiences. NCPIC stated, *Knowing and working with people who have disabilities lead (s) some young people to a career choice in teaching, especially special education* (p. 15). The National Clearing House for Careers in Special Education (NCPSE, 1996) stated that at a local level *career choices are often based on personal experience relating to a particular profession and on information gathered from professionals in that field* (p.1). The influence to choose special education as a profession intensifies when professionals take the time to mentor peer tutors. This supposition is the backbone of the Teacher Cadet programs throughout the United States.

Teacher Cadet Programs interact with junior high school students who have expressed an interest in teaching. This form of pre collegiate recruitment use structured activities to promote teaching as a career choice involving participants in developing pre-teaching skills in an internship experience (U.S. Department of Education, 2000). In 2005 alone, 3266 educators reporting to the Center for Educator Recruitment, Retention and Advancement in South Carolina (CERRA) indicated they were former Teacher Cadets (EIA Program Report, 2006-2007). Focusing local teacher recruitment efforts on high school students is part of the *grow your own* initiative and not a new or untested idea.

In 2003, National Clearinghouse for Professions in Special Education (NCPSE) determined that peer involvement with diverse populations was a deciding factor in young people's choice of special education as a career path. Students who join those with special needs in ongoing peer support groups characteristically develop positive opinions about individuals with disabilities (Burns, Certo, & Storey, 1999; Carter, Copeland, & Breen, 2001; Fisher, Pumpian, & Cox, 1998; Hemstetler, Peck & Giangreco, 1994). A commitment to an ongoing service learning experience allows the typical peer time to view the individual with a disability as a capable and contributing member of the community (Burns, Storey, & Certo, 1999). These positive perspectives result from adequate information, extended contact, a valuing of diversity, and the development of natural friendships (Fisher, Pumpian, & Cox, 1998; Helmstetler, Peck, & Giangreco, 1994; Nisbet, 1992; Winterman & Sapona, 2002; Winterman & Zascavage, 2007). Peer supports also effects academic and social benefits for both the students with disabilities and the typical peer involved in the peer support experience (Burns, Storey & Certo, 1999; Heron, Villareal, Yao, Christianson, & Heron, 2006; Short & Martin, 2005).

The present study combines information about support groups for students with disabilities from 187 East Texas high schools with explanatory variables taken from data of the Texas Education Agency Academic Excellence Indicator System. This study is a tangential section of a larger study on the influence of peer support groups in East Texas (Zascavage, Schroeder & Armstrong, in print 2008). Our primary goal was to refine our special education recruitment focus using statistical determinants on peer support activities for students with disabilities in East Texas based on the demographic characteristics of the school districts most likely to have peer support. The study examined the special educational environment surrounding peer support group formation: school budget, number of special education students, the school accountability rating, teacher student ratio, and amount spent per student receiving special education, campus enrollment, and the density and level of income of the school district. Based on the field literature position that peer support groups would be effective recruitment pools, the analysis investigated variables in a given school district with the purpose of determining which of these variables would influence future recruitment drives and funding allocations.

Based on the research premise that peer support for individuals with disabilities was of mutual benefit to typical peers and students with disabilities and the choice of special education as a career path, our secondary goal was to assess the status and determinants of local district peer support to determine to create an action plan for their increase.

Statistical Analysis of Support Groups

Using the school data website of the Texas Education Agency Academic Excellence Indicator System 2002-2003 (TEAEIS), we determined the demographic characteristics of the 187 high schools contacted in East Texas. These characteristics presented our independent variables (see Table 1). Because our goal was to determine the presence or absence of peer group formation (dependent variable) related to the demographic characteristics of participant school districts (independent variables) the analyses focused on the nature and likelihood of high schools in East Texas having peer support groups for students with disabilities.

Logistic regression allowed us to estimate the presence of ongoing support groups among the 187 high schools. This analysis used 12 explanatory variables (see Table 1) and transformations of those variables. Please note that to account for resource allocations in the absence of wage data, we used the number of special education (SPED) teachers per student and SPED dollars per student. Explanatory variables with an acceptable significance (5% or better) and substantial magnitude of association were considered important. Each was included in the analyses based on the plausibility of its association with the ongoing support groups.

Table 1
Description of Variables Used in Order of Decreasing Influence

Variable	Variable Description
edpct	Educationally disadvantaged, campus percent
region8	Region B, dummy variable for region B, also rural, 1 = located there, 0 = not located there.
region7	Region A is a rural region represented by a dummy variable represents whether an observation is in region A (1), or not (0)
sebdpct	Budget for students receiving SPED, as percent of total school budget
ln(accty)	School accountability at each high school, natural log is used to reduce the influence of possible heteroscedasticity.
ln(cenrol)	Total campus enrollment at each high school, natural log is used to reduced level of heteroscedasticity
tpsse	Teachers per student receiving SPED
sesdnt	Students receiving SPED services
sepct	Students receiving SPED services, percent of campus enrollment
dpsse	Dollars per student receiving SPED
popdens	Population density for the county in which the school is located
medincm	Median income level for county in which school is located

Note: variables are in descending magnitude (absolute value) of elasticity.
This enables a consistent order for all tables. Special Education (SPED)

Descriptive Statistics

The descriptive statistics for the data set appear in Table 2. We found no anomalies in reviewing these figures. The percentage of economically disadvantaged students determined by the percentage of students eligible to receive free or reduced-price lunch as determined by TEAEIS. Within our data set, the percentage of economically disadvantaged students ranged from 2.5% to 86.9% of the total school population, with a mean of 35.4%. The median annual income level for the county in which the school was located ranged from \$24,357 to \$70,385 (TEAEIS). The median income of the schools was \$37,829, which, according to current population survey data, is very close to mean of American middle class schools

(NCSE). The top of the income range was \$70,835, a figure five thousand dollars below the cut point between the middle- and high-income categories.

Table 2:
Descriptive Statistics of the Dataset

Number	Variable Label	Max	Mean	Min	Standard Deviation	Skew	Kurtosis
Dependent	S. G. ongoing	1.000	0.310	0.000	0.464	0.827	-1.330
Independent Variables							
1	edpct	86.9%	35.4%	2.5%	15.8%	35.2%	0.1%
2	regionB	1.000	0.176	0.000	0.382	1.711	0.938
3	regionA	1.000	0.412	0.000	0.493	0.361	-1.890
4	sebdpct	40.2%	10.3%	2.5%	4.3%	224.2%	1269.5%
5	lnacct	1.792	0.662	0.000	0.455	-0.392	-1.083
6	lncnr	8.383	6.235	4.190	0.949	0.202	-0.920
7	tpsse	0.146	0.051	0.015	0.020	1.433	3.166
8	sesdnt	451	107	6.00	90.4	1.36	1.31
9	sepct	29%	16%	5%	4%	17%	-24%
10	dpsse	\$25,627	\$2,950	\$663	\$2,189	\$6.49	\$62.3
11	popdens	2,523	521	14	905	2	1
12	medincm	\$70,835	\$37,829	\$25,347	\$10,430	\$2	\$4
	Nobs	187	187	187	187	187	187

N=187 high schools in Texas regions A, B and C.

School accountability data reflected the individual high school's accountability rating as established by the TEAEIS website data for 2004. Texas State Accountability Ratings depend upon on a composite of state testing results for regular and alternative assessment, SAT/ ACT scores, attendance, and advanced placement coursework. School accountability ratings are exemplary (1), recognized (2), acceptable (3), or unacceptable (4). We used a natural log for accountability and total campus enrollment to reduce the presence of heteroscedasticity (Goldfield & Quandt, 1965).

We presented the budget for students receiving special education services (sebdpct) as a percentage of the total school budget. Special education spending accounts for 13.9% of the total expenditures for elementary and secondary education (US Department of Education, 2002). For our 187 high schools, the mean percentage was 10.3%. This figure was slightly lower than the national average. In per-pupil terms, the total expenditure for a typical student with no special needs was \$6,556. For a student with special needs, the

average cost of special education in the United States was \$12,639. Of this \$12,639, \$8,080 allocated for special education services and \$4,394 for regular education services (US Department of Education, 2005, Fig. 1-47, p. 68). In our survey schools the mean dollars-per-student receiving special education (dpsse) was \$2,950 (SD = \$2,189, skew = 6.5, excess kurtosis = 61) compared to the national average of \$8,080 for special education services supplied to students with special needs. The national report did not provide information on the range or variance of their averages. However, it became clear that the resources allocated to special education students in Texas' regions A, B, and C varied so widely that this study could not support equity of service provision.

The percentage of school budget expenditure on special education (sebdpct) in our schools ranged from 2.5% to 40.2% and reflected the number of special education students (sesdnt) in the separate high schools. This demographic constraint was also apparent in the variable range for the percentage of students in each high school receiving special education (sepct). The number of teachers per student (tpsse) reflected the nature of the special education services offered in the school. In our survey schools, there was a mean of one teacher for every 20 students with a maximum of 1 to 8 and a minimum of 1 to 67.

Table 3
Regression Results on Ongoing Support Groups (SG 3)

Variable	Parameter	Elasticity relative to SG 3	Mean of Variable
Economically disadvantaged %	-1.09*	-95%	0.35
Region B	0.37*	64%	0.18
Region A	0.34*	26%	0.41
SPED student budget %	3.46*	19%	5.77
ln (accountability)	0.43*	6%	2.13
ln(campus enrollment)	-0.28*	0%	6.7
Teacher/SPED student	4.06*	0%	0.051
SPED student enrollment	0.000	0%	107
SPED student % of all students	0.000	0%	16%
\$/SPED per student	0.000	0%	2,950
County population density	0.000	0%	0.10
County median income	0.000	0%	\$34,525

*Significant at 0.01 or better.

Logistic Regression

The variable parameters shown in Table 3 are all of different dimensions. Therefore, in order to compare these variables, we computed the elasticity of each. Elasticity is the ratio of percent change in the dependent variable (the presence or lack of ongoing support groups, SG3) divided by the percent change in the explanatory variable. The elasticity reported in Table 3 show uniformly high levels of significance suggesting that the predictors have linearly independent associations with the probability of having a support group; any two or more variables may be simultaneous outcomes of other independents or variables not even included in the model. This would bias significance estimates. The significance levels risked bias if some/all independents were approximately linear combinations of other independents. In other words, collinearity among the explanatory variables would degrade the significance levels, rather than improve them (Madalla, 1994). However, regression analyses using various subsets of these variables showed consistent parameter estimates, contradicting the likelihood of multicollinearity. The sole remaining explanation was that the variables have independent influences on the probability of ongoing support groups.

The regression results appear in Table 3. The most influential variable, percentage of students from economically disadvantaged homes, has an elasticity of -95%. This indicates that if the percentage of all students considered economically disadvantaged increased by 100%, the percent of schools with support groups would drop by 95%. The significance and magnitude of a variable's association with the dependent (presence or not of an ongoing support group) are valid statistics irrespective of overall model significance (Wong & Mason, 1985). The percent of students from economically disadvantaged homes had the greatest association with support group probability. It is negative, meaning more economically disadvantaged students results in a substantial reduction of schools having support groups. The largest association was the percent of total budget used for special education, a variable controllable by local board policy, with an elasticity of 19%. (Some policy analysts question the use of variables that cannot be controlled by policy in a policy analysis. We feel that if a variable is plausibly important to the process being examined that it should be included. That will decrease bias in estimates of policy-variable coefficients. In a distillation process, the unchangeable physical thermodynamics of the constituents must be included, although they are fixed and uncontrollable.)

This means that a 10% increase in special education budget would increase the likelihood of an ongoing peer-support group forming by 2%. This is statistically significant but small in magnitude and importance.

Table 4 represents the upper and lower 25th percentiles of probability for ongoing support groups (SG-ongoing). The goal was to identify a multi-dimensional image of high schools (by the descriptive variables of Table 1) with and without ongoing support groups. A multi-dimensional image did not appear, although we did observe quite a difference between the high schools. Only the natural log of school overall accountability was significant between groups. Note that accountability should be controllable to some extent, indirectly by local school policy. Comparing the percent change from the upper 25 percentile to the lower 25 percentile, the natural log of accountability had an elasticity of -11% at a significance level of .05.

Keeping in mind that the worst state of accountability coded to be 4 and the best 1, a better accountability rating related positively with the probability that a high school would have an ongoing support group.

Chi-Square Distribution

The Wald statistic, which has a chi-square distribution established a final systematic check on the model's overall significance was made through. It estimated the significance of the model. Chi-square is a robust test. Significance improved with each addition of an independent variable in the stepwise logistic regression computation. The significance of the model was consistent with (but of course does not prove) the validity of the significance estimates of the individual independent variables. It was also consistent with the notion that every variable contributes significantly to the estimates of probability (of a school having an ongoing support group).

Table 4

Comparing Schools with Higher and Lower Likelihood of Having Ongoing Support Groups

75th percentile of SG-3	edpct	regionB	regionA	lnacct	lncl
mean	0.41	0.26	0.60	0.70	5.10
std dev	0.15	0.44	0.50	0.45	0.33
<hr/>					
25th percentile of SG-3					
mean	0.35	0.04	0.11	0.79	7.53
std dev	0.19	0.20	0.31	0.43	0.32
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Significant at $\alpha = 0.05$, Student t test, upper 25%ile compared lower 25%ile	no	no	no	yes	no
% change from low to high	18%	500%	460%	-11%	-32%

Discussion

Prediction of the Presence or Absence of Peer Groups

Our primary goal was to determine the demographic footprint of a high school most likely to have formed peer support groups. The percent of students from economically disadvantaged homes has the greatest association with support group probability. The relationship between the two is negative, meaning more economically disadvantaged students results in a substantial reduction of schools having support groups. The next largest association was location- in Regions B and A rather than C. Total budget allocated for special education was also a deciding factor as was the school accountability rating. Given these results, we would focus our immediate recruitment upon affluent areas, having larger special education budgets than surrounding districts and higher school accountability ratings. These factors interplay to create a likelihood of the presence of peer support groups and consequently a pool of students who are regularly interacting with students with disabilities and possibly considering a career in special education.

Factors to Consider When Promoting the Formation of Peer Groups

Our secondary goal was to determine the high schools least likely to have peer group support for students with disabilities and to use this demographic pattern to construct listings of high schools in the area least likely to have peer support. This listing of high schools might serve to focus long-term special education recruitment strategies, one of which would be supporting the development of peer support groups. For our purposes, again we used the percentage of economically disadvantaged students on the high school campus. This variable negatively associated with the probability that a high school would have a support group for students with disabilities. School location within Regions B and A was the next largest association, relative to region C, but like the percentage of economically disadvantaged students, it is a condition beyond any plausible change of school policy. The next largest association was the percent of total budget used for special education, with an elasticity of 19%. This is a policy variable, locally controllable although its effect is small. Finally, the natural log of accountability had an elasticity of 6%, which shows a small change in the likelihood of having a support group, in proportion to a 100% increase in the natural log of accountability.

The only adjustable variable at the school, district, region, or state level is percent of total budget allocated to special educational programs. The percentage of total campus budget allocated to special educational services was associated with increase in ongoing support groups. However, one would have to increase that budget by 100% to effect an approximate change of 19% change in support-group likelihood.

The two upper and lower 25th percentiles of probability for ongoing support are shown in Table 4. The goal was to develop an identifying multi-dimensional image of schools with and without on going support groups. Unfortunately, a multi-dimensional measure did not appear. Although observation indicated a large difference between the groups, only the natural log of school overall accountability rating was significant between groups. This means we have found a one-variable discriminator. Better accountability related positively with the probability that a school had ongoing support groups. We employed factor analysis as a final technique to find the statistical footprint of schools, but it did not yield any factors with plausible construct validity.

The relationship of accountability rating to the presence or absence of peer group formation is not surprising, but does alert us to examine the possible absence of peer support in Texas schools having low accountability ratings. Given the results, we might well focus long- term recruitment strategies on the investigation of the presence or absence of high school peer support groups in schools with lower accountability ratings and higher percentages of economically disadvantaged students.

Implications

There is a strong likelihood that individuals (teachers) will return after graduation to either their home community or a community similar to their home environment (Brown, Bishop, & Sindelar, 2005; Darling-Hammond & Sykes, 2003). Using this premise, school districts, where there exist critical shortages of special educators, might encourage and reward the active local high school special educator who is a visible presence as a leader in high school peer support committees and activities. These special educators directly influence the consideration of special education as a profession by local students, students most likely to return to the community as special educators

Local

For all students to have an opportunity to participate in pre-vocational activities such as peer mentoring, public schools must establish these service learning programs within the daily context of students' educational programming. According to Copeland, Hughes, Carter, Guth, Presley, Williams, and Fowler (2004), the benefits to both groups of students (students with special needs and the typical students) are too substantial to not intervene and make this a learning opportunity readily available to all learners.

Factors in our analysis suggest that exemplary schools, located in affluent middle-income areas, with large special education budgets, were most likely to have support groups and by natural extrapolation more likely to promote the consideration of special education as a career pathway. An unspoken factor that may be in existence in the more affluent schools is the increase number of special educators with smaller caseloads within the school setting. This increases the opportunities for students to interact with them on a larger variety of venues. The typical students witness the variety of roles special educators play within the overall scheme of the school. In highly effective schools, special educators participate in team teaching, co-teaching, and parallel teaching within the general curriculum classes. These activities are less likely to occur in schools where caseloads are at state maximums. Furthermore, at excellent schools, parents demand that their children with special needs are included into the regular curriculum increasing the incidental interactions among students (Palmer, Borthwick- Duffy, & Widamen, 1998; Bryer, Grimbeck, Beamish, & Stanley, 2004).

A less often discussed issue, is money. Many of the social events that evolve from clubs and schools group cost monies that disadvantaged student do not have to give. An outing to the movies can easily cost over fifteen dollars. This is an excessive amount of money for a financially burdened family. Instead of being embarrassed, students simply do not participate. If it is important to the school district to have future special educators whose family ties will bring them back to the district after college, then providing the financial means for student participation in club events might become a PTA priority project, principal's accounts, or the destination of monies received from school vending machines.

State

If we contend peer support for students with disabilities is of benefit to the social and emotional growth of both typical peer supporter and the student with a disability, how can we justify absence of these groups in economically deprived areas? From the standpoint of effective recruitment and service learning opportunities, assisting the local high schools to establish ongoing peer support might be a target project for university based disability support groups such as the Student Council for Exceptional Children and graduate level special education majors. Encouraging existing groups within the high school such as the Drama Club or the Astronomy Club to invite individuals with disabilities to join is another possibility to increase visibility, participation, and the possibility of friendship formation between typical students and their peers with disabilities. To make this more feasible, State Departments of Education might earmark a portion of the revenue currently used to forgive teachers' loans to promote peer support groups within the local high schools. Departments of Education could then provide schools with small stipends to bolster the schools' peer support efforts. This proactive approach might well directly reverse the increasing teacher shortages in special education while reaping the immediate benefits of decreased absenteeism and increased in student retention (Dopp & Block, 2004).

National

Many states have successfully established programs to promote Teacher Cadet Programs at the high school level. Taking advantage of this pre-collegiate recruitment program, local districts may consider seeking federal funding to supplement state scholarships, or loan forgiveness programs, thereby adding additional financial incentive for further commitment to special education. Furthermore, national programs such as Best Buddies and Student Council for Exceptional Children have formats for ongoing peer support programs beginning at the high school level and continuing at the university level. What is lacking is a tradition of predictable ongoing peer support that starts in early childhood and transitioning with the students; as a nation, our schools are feasible policy actions to increase the special-ed teacher supply have pockets of support rather than a whole outfit. What is needed is are strong recommendation from the Department of Education for the formation of peer support programs, publication of articles on which the recommendation is based, and funding of follow-up studies to replicate and refine the findings. This kind of policy actions has the potential to increase the special-ed teacher supply.

International

This study did not address ongoing peer support from the lens of ethnic or racial diversity. It is possible, but unlikely, that internal structures already in effect within the community make formal peer support in the schools unnecessary. The International Institute for Educational Planning (IIEP, 2006), sponsored by UNESCO, published a guidebook for educational emergencies. Chapter 15 of this guide on identification and recruitment of teachers did not mention or elude to special needs services. In areas under educational reconstruction, administrators demonstrated awareness of ethnic, gender, religious and language consideration as they interviewed teachers for basic pedagogical skills. In areas reconstructing from conflict, the guidebook cautions that established teacher standards might need to be relaxed (IIEP, 2006). In these strife areas, all children have very special needs and the presumption that being an educator of children with special needs takes a special calling is not commonplace. Peer support most likely occurs as a normal and necessary function of daily life.

Limitations and Future Research

There are limits to the findings of this study. First, although the sample size is adequate at 187 in yielding some significant associations, it was limited to the eastern part of Texas. Replicating this study in other states from northern, eastern and western regions would strengthen the findings. If the strong negative association (elasticity ≈ -1.1) between low-income and presence of ongoing-peer support groups prevails elsewhere, then it becomes logical to identify the factors at those schools impeding the formation of the support groups. The data should include factors that could identify barriers to support-group formation at schools with large numbers (over 25%) of students from economic disadvantage. These might be low overall budget/student, population density of the school district, total students/general population, age profile of general population, and proportion of student body that has special needs. These are descriptors of the environment of the schools and not changeable by policy. The fundamental causes behind absence of support groups may alternatively be lack of awareness of support groups' importance to future career choices or policy assigning higher priority to activities not concerned with special education. It seems likely that many or even most special educators and school administrators simply do not recognize the association

between ongoing peer-support groups and the increased likelihood that participants will choose special education as a career.

Using surveys and database analysis, the exploration of a wider range of factors would generalize our findings (or to refute them). Follow-up interviews in a qualitative, ground-field theory effort to identify barriers to forming ongoing peer-support groups is the methodology most likely to reveal systematic processes that account for absence of these groups in high schools, should quantitative analysis replicate the apparent association between presence of poverty and absence of support groups. Studies that track peers who support students with disabilities from elementary school through college and career choice would add a wider dimension of information and be of great value to policymakers. The literature review here established the need for more special education teachers and the efficacy of ongoing peer-support groups at producing them. Literature also addressed the mutual benefits that result from the interaction of the typical student with their peers with disabilities. From here on, research on recruitment should seek to find feasible means to increase this interaction at the local, state, national and international level.

Since teacher shortages are often location specific and requires innovative local solutions (Allen, 2005), what works one place may not be effective in another location. However, peer support groups are present or absent throughout the US, lending this study very likely to reflect the situations in many school districts. At this time, there are very few adequate empirical studies on the effectiveness of special education recruitment (Allen, 2005). Our study presents one possible cost effective, pro-active premise to impact local special education recruitment, the local determination of the presence or absence of peer support groups for students with disabilities.

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