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**Recruiting Deaf and Diverse Teachers:
Priorities of Preservice Teachers in Deaf Education**

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Abstract

The need to increase teacher diversity in deaf education has been a national concern over the last decade. The ethnic, racial, cultural, and linguistic composition of the teaching force has remained relatively unchanged; White, hearing, females make up the majority of the teaching force. In sharp contrast, the K-12 student population has become increasingly diverse which creates a chasm that is unlikely to change during the next decade without focused effort. This study considered group demographics and implications for culturally-responsive recruiting practices. The need for improved recruitment of Deaf professionals and diverse professionals is discussed, along with other associated challenges. Findings of a national study of recruitment priorities of preservice deaf educators are reported. Causal-comparative analyses revealed statistically significant recruitment priorities among groups of students as a function of hearing status and diversity status. The article provides suggestions for improved recruiting practices for deaf education teacher preparation programs.

Keywords: deaf, diverse, college, recruitment, retention

Introduction

The Deaf Mosaic

Deaf children are diverse. Deafness spans all cultural groups and transcends social class. Deaf Education has become a beautiful mosaic comprised of unique images of ethnicity, etiology, communication preference, and educational need. The Gallaudet Research Institute (2008) found that 51.3% of deaf and hard of hearing children identified during the 2006-2007 school year were from diverse families (n = 36,494). As sociocultural trends continue, so will the heterogeneity of the school-age population. In fact, census projections estimate 58% of American students will be non-White by 2050 (U.S. Census, 2000). In addition to ethnicity, each child is unique in

their etiologies, age of onset, and degree of hearing loss. From mild hearing impairments to profound losses, genetic deafness to medical complications, and prelingual onsets to latened-deafness, these factors have social, cultural, and academic implications (Moores, 2001). Language choice, use of assistive listening devices, and the type of programming the child receives at school, all create unique children (Andrews, Leigh, & Wiener, 2004). The combination of characteristics and the culmination of experiences work in harmony to frame the identities of deaf and hard of hearing children (Simms, Rusher, Andrews, & Coryell, 2009). Consequently, the profession requires culturally-aware teachers, sensitive to complex issues surrounding the needs of deaf children and their families.

Unfortunately, the hiring of deaf, minority, and minority-deaf professionals is not keeping pace with the increase in school-age minority populations (Klopping, 2005). In sharp contrast to student demographics is the homogeneity of the teacher workforce. Deaf Education professionals who are deaf and represent ethnic minority groups are extremely rare. In 2006, 83% of general education teachers were White (National Center for Educational Statistics, 2006). Similarly, 86% of special education teachers reported their ethnicity as White (Billingsley, 2002). Trends are similar in deaf education. Jensema & Corbett (1980), Woodward (1985), Cohen, Fischgrund & Redding (1990), and Moores (1992) found less than 10% diversity among deaf education professionals. Andrews & Jordan (1993), found only 15.2% of professionals to be Deaf, 10.4% persons of Color and 1.2% Deaf persons of Color. Most recently, a national survey of deaf education programs by Simms, Rusher, Andrews, & Coryell (2009), found only 22% of teachers to be Deaf, 21.7% to be diverse, with only 2.5% being minority-Deaf (programs, $n = 313$; teachers, $n = 2,766$). This striking disparity deserves attention. Without having personal experiences to draw upon, many teachers struggle to deal with the cultural and linguistic implications of serving these diverse children. As a result, diverse students must navigate through multilingual and multicultural environments with little support (Cohen, 1993; Gerner de Garcia, 1993; Parasnis, 1996).

Advantages to Diversity in the Classroom

Most deaf and minority-deaf children complete their childhood education without being taught by teachers who share similar cultural and linguistic experiences (Andrews & Jordan, 1993). For these reasons, there is increasing pressure on the profession to make more and better use of deaf adults as

teachers and administrators (Klopping, 2005; Andrews, 2003). Several advantages of a diverse classroom composition have been documented in the literature (Andrews, 2003; Kögler, 1999; Tyler, Yzquierdo, Lopez-Reyna, & Flippin, 2002). A diverse classroom provides an environment which allows students to explore unfamiliar cultures (Carnevale & Frey, 2000), and this experience may foster greater intercultural understanding. In addition, diversity fosters intellectual growth through discussion of different lived experiences, points of view, and perspectives (Knefelkamp & David-Lang, 2000). Through the process of learning from each other, students' levels of racial prejudice may be reduced, resulting in increased tolerance towards racial and gender differences (Chang, 2000).

Culturally and linguistically diverse teachers also influence classroom experiences. According to Dee (2001), academic outcomes may increase when students are paired with teachers who match their race or ethnicity. Teachers who share a language and cultural community with their students have the potential to impact students' comfort levels. Dee (2001) terms this the "passive teacher effect," referring to a comfort level that makes it easier for diverse students to approach a teacher or ask for assistance. Such teachers may serve as role models and help to reduce the stigma that often accompanies being different. Diverse teachers can help students recognize that their differences, whether ethnic, racial, linguistic, or cultural need not represent a liability (Michael-Bandele, 1993). They may also hold higher expectations for student performance and advocate for students, while encouraging them to aspire to greater levels of success. Culturally affirming schools that utilize culturally responsive school wide discipline models are showing promising results in increasing student time on task and improving educational outcomes (Jones, Caravaca, Cizek, Horner, & Vincent, 2006).

Benefits of Employing Deaf Teachers

Deaf professionals are able to serve as positive role models, having advanced linguistic skill in American Sign Language (ASL) and understanding the problems inherent in hearing loss (DeLana, Gentry, & Martin, 2005). The benefits of having teachers who are deaf serving children with hearing loss are numerous. Beyond those mentioned previously, they are often the most fluent language models in schools and may serve to increase the linguistic capacity of students (Andrews & Jordan, 1993). They often function as cultural brokers, helping their students navigate between Deaf culture and the English-dominant hearing culture (Klopping, 2005). Deaf teachers tend

to use pedagogical techniques congruent with the visual learning needs of deaf and hard of hearing students, thus impacting educational outcomes (Andrews & Franklin, 1997). As many residential schools for the deaf exemplify, a critical mass of teachers who are deaf creates a sociolinguistically-rich environment which facilitates natural language development in young deaf children and provides a stronger foundation for academic learning. Paransis & Fischer (2005) stated, "A critical mass of ethnic-minority faculty and staff and ethnic-minority students was necessary...to change the campus climate and institutional awareness regarding diversity" (p. 348). As with diverse hearing children, when the school environment becomes more culturally affirming and culturally responsive, outcomes for children who are deaf and hard of hearing improve as well. Therefore, institutions must produce a critical mass of quality deaf teachers, who understand culturally affirming and culturally responsive techniques.

Recruitment Efforts

The Association of College Educators of the Deaf and Hard of Hearing (ACEDHH) has been concerned about the impending teacher shortage and workforce diversification. In 1989, Coryell investigated strategies for the recruitment of deaf and hard of hearing students. The results indicated that scholarships/stipends were used most frequently as a recruitment tool. In 1993, Andrews and Martin offered an eight-point recruitment and retention strategy which included faculty role models; mentoring; lectures, seminars and conferences; non-biased admissions policies; focused recruiting efforts; financial support; faculty and student scholarship, and graduate coursework which encompasses diverse issues. Baker and Daugaard (2004) reported similar findings in a survey of deaf education faculty that also examined recruitment strategies. In addition to scholarships/stipends, other strategies reported by Baker and Daugaard by frequency were: using alumni as recruiters, providing academic support services to students, inviting deaf and hard of hearing lecturers, providing deaf and hard of hearing role models, allowing alternative methods of assessment, and providing advising sensitive to diverse students and following-up with graduates regarding program improvement. The survey also revealed that 74% of faculty felt they did a poor to moderate job of recruiting diverse preservice teachers; the majority of programs reported not having a formalized recruitment plan. As a result, recruitment often occurred without much planning or structure.

Purpose of the Study

This study began as an activity of the ACEDHH Preparing Tomorrow's Teachers to Use Technology (PT3) Join Together Project, a national grant designed to facilitate cross-institutional collaboration and research within the field of deaf education. The purpose of this study was to ascertain college selection priorities among students pursuing a degree in deaf education. Researchers sought an understanding of program elements that appealed to prospective students. Differentiation of selection priorities among respondents was of particular interest.

Study Terminology

During the literature review, it was noted that the terminology used to describe ethnic, cultural, and linguistic diversity varied from publication to publication. As a result, researchers struggled with appropriate terminology to describe participants during the processes of creating the survey and generating findings. Ultimately, we chose terms that we felt best described potential survey respondents, without overly narrowing or broadening the descriptors. Preservice teachers were asked to self-identify in three areas: 1) ethnicity (i.e., Hispanic, African-American, American Indian/Alaskan Native, Asian/Pacific-Islander, Multiethnic, or Other); 2) gender (i.e., male or female); and 3) hearing status (i.e., deaf, hard of hearing, hearing impaired, or hearing). Regarding hearing loss, the survey instrument provided a variety of categories to allow respondents to self-identify, according to their comfort. However, for the purposes of this particular study, the nuances, whether physical or cultural, between hard of hearing, hearing impaired, latened deaf, etc, were irrelevant. Researchers were particularly interested in identifying trends among individuals who were hearing and non-hearing, diverse and non-diverse. Once the data was collected, researchers then categorized respondents into one of four groups: hearing + non-diverse, hearing + diverse, deaf + non-diverse, deaf + diverse.

Methodology

This causal-comparative study employed survey methodology with a purposive, convenient sample. Researchers distributed an online survey to preservice Deaf Educators at eight teacher-training institutions: Lamar University (Beaumont, TX), University of Tulsa (Tulsa, OK), University of Science and Arts of Oklahoma (Chickasha, OK), Eastern Kentucky University (Richmond, KY), Illinois State University (Normal, IL), Western

Oregon University (Monmouth, OR), University of Tennessee (Knoxville, TN), and Flagler College (St. Augustine, FL).

Participants

Faculty members provided researchers with email contact information for their students enrolled in their programs. The online survey was distributed to the convenient sample of 474 preservice teachers with 248 individuals responding, resulting in a 53% response rate. This included Lamar University (82 distributed, 79 returned), University of Tulsa (12 distributed, 10 returned), University of Science and Arts of Oklahoma (38 distributed, 16 returned), Eastern Kentucky University (195 distributed, 44 returned), Illinois State University (8 distributed, 7 returned), Western Oregon University (26 distributed, 19 returned), University of Tennessee (23 distributed, 12 returned), and Flagler College (90 distributed, 61 returned). These eight programs account for 21% ($n = 8$) of all U.S. programs accredited by the Council of Education of the Deaf ($n = 38$) (ACEDHH, 2009).

Participant backgrounds varied based on gender, age, ethnicity, hearing status, educational background, and geographical region of training. Of the 248 participants, 73.8% ($n = 183$) were between the ages of 18 and 29. Consistent with workforce trends (Andrews & Jordan, 1993; Andrews, Rusher, Simms, & Coryell, 2007), 83.9% ($n = 208$) were Female, 81% ($n = 201$) were White, and 64.5% ($n = 116$) were Hearing. Seventy-three percent of participants graduated from public schools. Geographic region varied with 39.1% from the South (TN, NC, SC, AL, MS, GA, FL, LA, TX), 24.6% from the Midwest (OK, AR, MO, KS, NE, IA, IL, IN, OH), 22.6% from the East (VA, WV, PA, NY, NH, VT, ME, MA, RI, KY, NJ, DE, MD, CT, DC), 7.3% from the West (NM, AZ, CA, NV, UT, CO, WA, OR) and 2.4% from the North: (MI, WI, MN, ND, SD, ID, WY, MT). Table 1 provides complete demographic information.

Table 1: Demographic Background of Participants, N=248

Demographic Background	n	Percent
Gender		
Male	36	14.5%
Female	208	83.9%
Age		
18-21	91	36.7%
22-29	92	37.1%
30-37	39	15.8%
38-45	10	4.0%
46-53	15	6.0%
Ethnicity		
African American	9	3.6%
American Indian/Alaskan Native	3	1.2%
Asian/Pacific-Islander	3	1.2%
Hispanic	12	4.8%
Multi-Ethnic	4	1.6%
White	201	81%
Other	8	3.2%
Hearing Status		
Deaf	73	29.4%
Hard of Hearing	11	4.4%
Hearing	116	64.5%
Educational Background, Type of High School Graduated From		
Charter or Magnet	0	0.0%
Home School	4	1.6%
Public School	181	73.0%
Residential	34	13.7%
Other	25	10.1%
Geographical Region		
East: VA, WV, PA, NY, NH, VT, ME, MA, RI, KY, NJ, DE, MD, CT, DC	56	22.6%
Midwest: OK, AR, MO, KS, NE, IA, IL, IN, OH	61	24.6%
North: MI, WI, MN, ND, SD, ID, WY, MT	6	2.4%
South: TN, NC, SC, AL, MS, GA, FL, LA, TX	97	39.1%
West: NM, AZ, CA, NV, UT, CO, WA, OR	18	7.3%
Outside of the United States	4	1.6%

Instrumentation and Collection Procedures

Researchers assembled an electronic survey instrument comprised of 40 questions: 13 demographic, 25 closed-ended priority scales, and 2 open-ended. Participants were asked to recall their priorities when determining which specific program to attend. Twenty-five scaled questions sought understanding of aspects that respondents deemed important. Scaled questions were divided into six strands: Program Demographics, Cost of Attendance, Curriculum Components, Reputation, Language Accessibility, and Academic Support. Respondents were asked to rate the importance of each program element on a scale from 1 (Low) to 5 (High). Researchers defined numerical scores as: *very low importance* (1 to 1.5), *low importance* (1.6 to 2.5), *moderate importance* (2.6 to 3.4), *high importance* (3.5 to 4.4), and *very high importance* (4.5 to 5.0). Survey questions were not designed to rate student satisfaction with their program's adherence to these priorities, rather they determined which program elements were of highest priority to respondents when selecting a college. An evaluation of Cronbach's alpha determined scale reliability ($\sigma = 0.92$). All distributions were logged and tracked electronically using an online software package.

Findings

A review of descriptive statistics yielded recruitment priorities for the collective sample and for each group of survey participants. Variation between groups of respondents occurred as a function of diversity and hearing status. Consequently, causal-comparative analyses of data were utilized to determine whether the variation between and among groups occurred randomly or with statistical significance. Two-way analyses of variance (ANOVA) were conducted to determine if hearing status, diversity status, or the interaction of both, accounted for differences in survey responses (see Table 2).

Table 2: Descriptive Statistics for Priority Questions, All Respondents, $N = 238$

Priority	n	\bar{x}	σ
Location of the College: State or Region	238	3.62	1.23
Location of the College: Metropolitan, Urban, Rural, Etc	235	3.03	1.16
Cost of Living in the City where the College/University is Located	236	2.93	1.19
Cost of Tuition	236	3.63	1.32
Opportunities for Tuition Waivers	216	2.88	1.69
Opportunities for Scholarships, Grants, Work Study, Etc.	235	3.81	1.33
# Students from the Same Linguistic/Cultural Background	235	2.58	1.33
Presence/Proximity of a Community Outside the University	234	2.68	1.28
Campus Friendly Towards my Linguistic/Cultural Background	234	3.32	1.29
Curriculum Philosophy (Oral, Comprehensive, Bilingual)	234	3.73	1.25
Program's Communication Philosophy/Language Policy	236	3.44	1.37
Quality, Certification, and Availability of Staff Interpreters	233	3.13	1.53
College/University Faculty Skill and Expertise	236	4.35	.96
Language Accessibility in the Academic Setting	234	2.96	1.52
Language Accessibility in the Dorm/Leisure Settings	232	2.38	1.42
Flexibility in Entrance Requirement Options	236	2.85	1.29
Level of Academic Rigor	235	3.54	1.05
Flexibility in Degree Plan	235	3.49	1.17
Alternative Methods of Assessment Available	234	2.50	1.38
Availability of Early and Frequent Advising	235	3.27	1.31
Proximity and Strength of Possible Practicum Sites	234	3.45	1.24
Availability of Free Programs to Assist with Academic Difficulties	235	2.87	1.37
Diversity in Faculty & Staff Population	235	3.03	1.35
Level of Integration of Technology in the Academic Setting	235	3.22	1.36
Positive Comments from Students/Alumni	233	3.44	1.22

Strand #1: Program Demographics

Six items comprised the Program Demographics strand of the survey. An evaluation of Cronbach's alpha determined strand reliability ($\sigma = 0.70$). The first two items in the Program Demographics strand referred to the location of the college in the state/region ($n = 238$; $\bar{x} = 3.62$; $\sigma = 1.23$) and the type of setting, whether metropolitan, urban, or rural ($n = 235$; $\bar{x} = 3.03$; $\sigma = 1.16$). The next set of two questions regarded diversity, the presence and number of students from respondents' linguistic and/or cultural backgrounds ($n = 235$; $\bar{x} = 2.58$; $\sigma = 1.33$) and faculty diversity ($n = 235$; $\bar{x} = 3.03$; $\sigma = 1.35$). The fifth item in the strand considered the respondents' perception of campus friendliness towards their linguistic and cultural background ($n = 234$; $\bar{x} = 3.32$; $\sigma = 1.19$). The last item in the strand considered the presence of a shared linguistic and cultural community outside of the university and its proximity to campus ($n = 234$; $\bar{x} = 2.68$; $\sigma = 1.28$). See Table 3.

Table 3: Strand #1, Program Demographics: Two-Way ANOVA

Strand #1: Program Demographics Priority Area	Non-Diverse		Diverse		F _{div}	F _{hear}	F _{div} x F _{hear}		
	Hear	Deaf	Hear	Deaf					
Location of the College: State or Region	n	132	61	21	22	F	1.43	0.24	0.86
	\bar{x}	3.63	3.72	3.57	3.27	df	1	1	1
	σ	1.22	1.25	1.29	1.24	p	0.23	0.63	0.36
Location of the College: Metropolitan, Urban, Rural, Etc	n	132	59	21	22	F	0.43	0.13	0.71
	\bar{x}	2.96	3.20	3.0	3.27	df	1	1	1
	σ	1.10	1.34	1.14	1.24	p	0.52	0.72	0.40
Population of Students from the Same Linguistic or Cultural Background	n	131	60	20	22	F	0.61	36.95*	0.31
	\bar{x}	2.15	3.5	2.10	3.23	df	1	1	1
	σ	1.08	1.37	1.02	1.31	p	0.44	0.00	0.58
Diversity in Faculty & Staff Population	n	131	59	21	22	F	0.46	7.98*	3.34
	\bar{x}	2.64	3.66	3.19	3.41	df	1	1	1
	σ	1.28	1.27	1.37	1.22	p	0.50	0.01	0.07
A Campus that is Friendly Towards my Linguistic/ Cultural Background	n	130	60	20	22	F	0.17	34.11*	1.52
	\bar{x}	2.84	4.23	3.0	3.91	df	1	1	1
	σ	1.24	0.91	1.17	1.07	p	0.68	0.00	0.22
Presence and Proximity of a Community Outside the University	n	130	59	21	22	F	0.38	48.37*	3.31
	\bar{x}	2.16	3.76	2.38	3.32	df	1	1	1
	σ	1.00	1.06	1.32	1.21	p	0.54	0.00	0.07

*Denotes statistical significance at a 95% confidence interval; $p < .05$.

Collectively, respondents rated “Location of the College: State/Region” as *high importance*. A two-way ANOVA revealed no significant main effect for diversity status $F(1, 1) = 1.43, p = 0.23$ or hearing status $F(1,1) = 0.24, p = 0.63$ and no statistically significant interaction effect $F(1, 1) = 0.86, p = 0.36$. Collectively and in each group, respondents rated “Location of the College: Metropolitan/Urban/Rural” as *moderate importance*. The two-way ANOVA revealed no significant main effect for diversity status $F(1, 1) = 0.43, p = 0.52$, hearing status $F(1,1) = 0.13, p = 0.72$ or interaction effect $F(1, 1) = 0.71, p = 0.41$. Collectively, respondents rated “Students with a Shared Linguistic and/or Cultural Background” as *moderate importance*. The two-way ANOVA revealed significant main effect for hearing status $F(1,1) = 36.95, p = 0.00$ but not for diversity status $F(1, 1) = 0.61, p = 0.44$ and there was no statistically significant interaction effect $F(1, 1) = 0.31, p = 0.58$. Collectively, respondents rated “Faculty Diversity” as *moderate importance*. However, deaf + non-diverse ($n = 59$) the rated this as having *high importance*. The two-way ANOVA revealed significant main effect for hearing status $F(1,1) = 7.98, p = 0.01$ but not for diversity status $F(1, 1) = 0.46, p = 0.50$ and there was no statistically significant interaction effect $F(1, 1) = 3.34, p = 0.69$. Collectively, respondents rated “Campus Friendliness towards Respondent’s Linguistic and Cultural Background” as *moderate importance*. Both hearing groups rated this item as *moderate importance*, while deaf groups rated this item as having *high importance*. The two-way ANOVA revealed significant main effect for hearing status $F(1,1) = 34.12, p = 0.00$ but not for diversity status $F(1, 1) = 0.17, p = 0.68$ or interaction effect $F(1, 1) = 1.52, p = 0.22$. Collectively, respondents rated “Linguistic and Cultural Community outside of the University” as *moderate importance*. Hearing respondents rated the item as *low importance*. The two-way ANOVA revealed significant main effect for hearing status $F(1,1) = 48.37, p = 0.00$ but not for diversity status $F(1, 1) = 0.38, p = 0.54$ or interaction effect $F(1, 1) = 3.31, p = 0.07$.

Strand #2: Cost of Attendance

Four items comprised the Cost of Attendance strand of the survey. An evaluation of Cronbach’s alpha determined strand reliability ($\sigma = 0.46$). The first item considered the cost of tuition and fees ($n = 236; \bar{x} = 3.63; \sigma = 1.32$). The second and third items regarded opportunities for scholarships, grants, work study, and fellowships ($n = 235; \bar{x} = 3.81; \sigma = 1.33$) and opportunities for complete tuition waivers ($n = 216; \bar{x} = 2.88; \sigma = 1.69$). The final item in

the strand addressed the cost of living in the city where the college/university was located ($n = 236$; $\bar{x} = 2.93$; $\sigma = 1.19$). See Table 4.

Table 4: Strand #2, Cost of Attendance: Two-Way ANOVA

Strand #2: Cost of Attendance		Non-Diverse		Diverse		F _{div}	F _{hear}	F _{div} / F _{hear}	
Priority Area		Hear	Deaf	Hear	Deaf				
Cost of Tuition	n	132	59	21	22	F	0.52	16.43*	0.32
	\bar{x}	3.94	3.19	3.90	2.91	df	1	1	1
	σ	1.01	1.56	1.38	1.57	p	0.47	0.00	0.57
Opportunities for Scholarships, Grants, Work Study, Fellowships	n	131	59	21	22	F	3.33	55.59*	1.09
	\bar{x}	3.69	3.86	4.10	4.23	df	1	1	1
	σ	1.35	1.41	0.94	1.15	p	0.07	0.00	0.30
Opportunities for Tuition Waivers	n	120	58	16	20	F	2.92	0.47	0.01
	\bar{x}	2.03	4.16	2.75	4.35	df	1	1	1
	σ	1.33	1.35	1.57	1.18	p	0.09	0.50	0.92
Cost of Living in the City where the College/ University is Located	n	132	60	21	21	F	1.69	0.60	0.60
	\bar{x}	2.77	3.08	3.19	3.19	df	1	1	1
	σ	1.08	1.32	1.37	1.21	p	0.20	0.44	0.44

*Denotes statistical significance at a 95% confidence interval; $p < .05$.

Collectively, respondents rated “Cost of Tuition” as having *high importance*. Hearing survey participants rated this as *high importance*; deaf respondents rated it as *moderately important*. A two-way ANOVA revealed significant main effect for hearing status $F(1, 1) = 16.43$, $p = 0.00$ but not for diversity $F(1, 1) = 0.52$, $p = 0.47$ and there was no statistically significant interaction effect $F(1, 1) = 0.32$, $p = 0.57$. These findings should be couched with the remaining strand items to be accurately interpreted. At first glance, it seems hearing respondents were more concerned about funding their studies than deaf respondents. However, it is important to note that the cost to attend college includes a balancing of all elements in the strand and cost of tuition is relative to the amount of scholarships, grants, waivers, and other sources of financial assistance available to individual respondents. A large number of deaf students in the study were from Texas ($n = 79$) which provides tuition waivers for all deaf residents, making the actual cost of tuition irrelevant. By reviewing results of this item in context with all other items in the strand, it is clear that funding their education was of high importance to all participants.

Collectively and in each group, respondents rated “Opportunities for Scholarships, Grants, Work Study, and Fellowships” as having *high importance*. A two-way ANOVA revealed no significant main effect for hearing status $F(1, 1) = 0.47, p = 0.50$, diversity $F(1, 1) = 2.92, p = 0.09$, or interaction effect $F(1, 1) = 0.01, p = 0.92$. This may also explain why both groups of deaf respondents did not rate cost of tuition as highly; tuition costs may be seen as relative to scholarship or grant offsets. Some states such as Texas offer tuition waivers to qualifying individuals. Because many of the participants were from Texas ($n = 79$), this question was included and may have impacted results on the previous two items in this strand, especially the cost of tuition, as previously explained. The collective sample rated “Tuition Waivers” as having *moderate importance*. Accordingly, a two-way ANOVA revealed a statistically significant main effect for hearing status $F(1, 1) = 55.59, p = 0.00$ but not for diversity $F(1, 1) = 3.33, p = 0.07$ or interaction effect $F(1,1) = 1.09, p = 0.30$. Interestingly, 30 individuals did not respond to this question, most likely because they were not sure what tuition waivers referred to since most states do not offer this option.

The last item in the strand weighed the cost of living in the location of the program as this may indirectly impact the cost of attendance. Collectively, the sample reported “Cost of Living in the City where the College/University is Located” as having *moderate importance*. A two-way ANOVA revealed no significant main effects for hearing $F(1, 1) = 0.60, p = 0.44$, diversity $F(1, 1) = 1.69, p = 0.20$, or interaction effect $F(1, 1) = 0.60, p = 0.44$.

Strand #3: Curriculum Components

Five items comprised the Curriculum Component strand. An evaluation of Cronbach’s alpha determined strand reliability ($\sigma = 0.73$). The first item regarded the curriculum philosophy of the teacher training program ($n = 234; \bar{x} = 3.73; \sigma = 1.25$). The second item dealt with the program’s level of academic rigor ($n = 235; \bar{x} = 3.54; \sigma = 1.05$). The third item referred to the flexibility in degree planning and options for individualized learning ($n = 235; \bar{x} = 3.49; \sigma = 1.17$). The fourth referred to the proximity and strength of potential practicum and field sites ($n = 234; \bar{x} = 3.45; \sigma = 1.24$). The last item considered the level of technology integration in the academic setting ($n = 235; \bar{x} = 3.22; \sigma = 1.36$). See Table 5.

Table 5: Strand #3, Curriculum Components: Two-Way ANOVA

Strand #3: Curriculum Components		Non-Diverse		Diverse		F _{div}	F _{hear}	F _{div} x F _{hear}	
Priority Area		Hear	Deaf	Hear	Deaf				
Curriculum Philosophy (Oral, Comprehensive, ASL/English Bilingual)	n	130	60	20	22	F	1.45	16.87*	0.85
	\bar{x}	3.41	4.43	3.35	4.00	df	1	1	1
	σ	1.30	0.77	1.50	0.98	p	0.23	0.00	0.36
Level of Academic Rigor	n	131	59	21	22	F	0.23	0.53	0.81
	\bar{x}	3.42	3.71	3.67	3.64	df	1	1	1
	σ	1.10	0.93	1.11	0.95	p	0.63	0.47	0.37
Flexibility in Degree Plan	n	131	59	21	22	F	0.57	0.44	0.58
	\bar{x}	3.43	3.71	3.43	3.41	df	1	1	1
	σ	1.13	1.18	1.33	1.18	p	0.45	0.51	0.45
Proximity and Strength of Possible Practicum Sites	n	131	59	21	21	F	0.17	0.91	0.35
	\bar{x}	3.45	3.37	3.67	3.33	df	1	1	1
	σ	1.29	1.20	1.24	1.02	p	0.68	0.34	0.55
Level of Integration of Technology in the Academic Setting	n	131	59	21	22	F	0.00	32.35*	0.27
	\bar{x}	2.82	3.93	2.71	4.05	df	1	1	1
	σ	1.30	1.17	1.19	1.17	p	0.99	0.00	0.60

*Denotes statistical significance at a 95% confidence interval; $p < .05$.

The first item in this strand, “Curriculum Philosophy” related to the philosophy represented in the programs curriculum (e.g., comprehensive, oral/aural, total communication, bilingual). Collectively, respondents rated this area as being of *high importance*. Hearing respondents rated this item as having *moderate importance*. Both deaf groups rated this item as having *high importance*. Respondents in the deaf + non-diverse group rated this priority higher than any other item on the strand. A two-way ANOVA identified statistically significant main effect for hearing status $F(1,1) = 16.87$; $p = 0.00$. No significant effect for diversity $F(1, 1) = 1.45$, $p = 0.23$ or interaction effect $F(1, 1) = 0.85$, $p = 0.36$ could be identified.

“Level of Academic Rigor” was collectively rated as having *high importance*.

A two-way ANOVA identified no significant main effects for diversity $F(1, 1)$, <https://repository.wcsu.edu/jadara/vol46/iss1/4>

1) = 0.23, $p = 0.63$, hearing status $F(1, 1) = 0.53$, $p = 0.47$, or interaction effect $F(1, 1) = 0.81$, $p = 0.37$.

“Flexibility in Degree Planning” collectively rated as having *moderate importance*. The group of deaf + non-diverse ($n = 59$) rated this item as *high importance*. A two-way ANOVA identified no significant effects for diversity $F(1, 1) = 0.57$, $p = 0.45$, hearing status $F(1, 1) = 0.44$, $p = 0.51$, or interaction effect $F(1, 1) = 0.58$, $p = 0.45$.

The collective sample rated “Proximity and Strength of Practicum and Field Sites” as having *moderate importance*. However, hearing + diverse respondents rated this area as having *high importance*. A two-way ANOVA revealed no significant main effect for diversity $F(1, 1) = 0.17$, $p = 0.68$, hearing status $F(1, 1) = 0.91$, $p = 0.34$, or interaction effect $F(1, 1) = 0.35$, $p = 0.55$. It is interesting that both hearing groups rated this area higher than did the two deaf groups. Researchers suspected that hearing preservice teachers, having little exposure to classrooms with deaf and hard of hearing children may place greater value on field experience than deaf preservice teachers, most of whom have been educated in that environment.

The last item in the Curriculum Components strand, “Technology Integration in Academic Settings” was rated collectively by respondents as having *moderate importance*. Hearing participants rated the area as *moderate importance*, whereas both deaf groups cited this element as *high importance*. A two-way ANOVA revealed significant main effects for hearing status $F(1, 1) = 32.35$, $p = 0.00$. No significant effect was identified for diversity $F(1, 1) = 0.00$, $p = 0.99$ or interaction effect $F(1, 1) = 0.27$, $p = 0.60$.

Strand #4: Language Accessibility

The fourth strand considered elements of language accessibility, particularly for deaf respondents. An evaluation of Cronbach’s alpha determined strand reliability ($\sigma = 0.86$). The first and second items dealt with language accessibility in the academic setting ($n = 234$; $\bar{x} = 2.96$; $\sigma = 1.52$) and dorm/leisure settings ($n = 232$; $\bar{x} = 2.38$; $\sigma = 1.42$), respectively. The third item dealt the program’s language policy ($n = 236$; $\bar{x} = 3.44$; $\sigma = 1.37$). The final item dealt with the quality, certification, and availability of interpreters ($n = 233$; $\bar{x} = 3.13$; $\sigma = 1.53$). See Table 6.

Table 6: Strand #4, Language Accessibility: Two-Way ANOVA

Strand #4: Language Accessibility		Non-Diverse		Diverse		F _{div}	F _{hear}	F _{div} X F _{hear}	
Priority Area		Hear	Deaf	Hear	Deaf				
Language Accessibility in the Academic Setting	n	129	60	21	22	F	2.32	78.94*	0.96
	\bar{x}	2.30	4.33	2.19	3.82	df	1	1	1
	σ	1.31	0.97	1.29	1.01	p	0.13	0.00	0.33
Language Accessibility in the Dorm/Leisure Settings	n	129	58	21	22	F	0.51	24.88*	0.85
	\bar{x}	1.95	3.28	2.00	2.91	df	1	1	1
	σ	1.12	1.57	1.10	1.66	p	0.48	0.00	0.36
Language Policy	n	131	60	21	22	F	0.60	35.21*	0.85
	\bar{x}	2.97	4.40	3.00	4.05	df	1	1	1
	σ	1.32	0.89	1.41	1.13	p	0.44	0.00	0.36
Quality, Certification, and Availability of Interpreters	n	120	60	19	22	F	4.02*	29.17*	0.83
	\bar{x}	2.68	4.20	3.50	3.50	df	1	1	1
	σ	1.47	0.94	1.57	1.57	p	0.05	0.00	0.37

*Denotes statistical significance at a 95% confidence interval; $p < .05$.

“Language Accessibility in Academic Settings” was rated collectively by the group as having *moderate importance*. However, hearing respondents rated this item as having *low importance* while deaf participants rated it of *high importance*, not surprising since this area directly impacts deaf students’ academic success in the program. A two-way ANOVA revealed significant main effects for hearing status $F(1, 1) = 78.94, p = 0.00$. No significant effect was identified for diversity $F(1, 1) = 2.32, p = 0.13$ or interaction effect $F(1, 1) = 0.96, p = 0.33$. “Language Accessibility in Dorm/Leisure Settings” was rated as *low importance* by the collective group. Although hearing respondents rated this as *low importance* and deaf participants rated it as *moderate importance*, this item was not rated as highly as accessibility in academic settings. A two-way ANOVA revealed significant main effects for hearing status $F(1, 1) = 24.88, p = 0.00$. No significant effect was identified for diversity $F(1, 1) = 0.51, p = 0.48$ or interaction effect $F(1, 1) = 0.85, p = 0.36$.

The item, “Language Policy” referred to language use and communication policies observed within the program, including whether instructors sign for themselves or use interpreters, how non-deaf peers were required to communicate in program classes, and if any language assessments or screenings were used. Overall, this item was rated by the collective sample

as having *moderate importance*. Hearing respondents rated language policy as *moderate importance*, much higher than language accessibility in academic or dorm settings. This ranking is not unexpected given that language use and communication policies impact hearing students directly, especially if the program requires them to sign during academic instruction and screens out individuals with inadequate sign language fluency. Deaf respondents rated this item as having *high importance*. A two-way ANOVA revealed significant main effects for hearing status $F(1, 1) = 35.21, p = 0.00$. No significant effect was identified for diversity $F(1, 1) = 0.60, p = 0.44$ or interaction effect $F(1, 1) = 0.85, p = 0.36$.

The last item in the language accessibility strand addressed interpreter issues, "Quality, Certification, and Availability of Interpreter". The collective sample regarded this item as having *moderate importance*. However, groups of deaf students rated this area as having *high importance*. A two-way ANOVA revealed significant main effects for hearing status $F(1, 1) = 29.17, p = 0.00$ and diversity $F(1, 1) = 4.02, p = .05$. No significant effect was identified for interaction effect $F(1, 1) = 0.83, p = 0.37$.

Strand #5: Academic Support

This strand addressed areas of academic support that are available to students. An evaluation of Cronbach's alpha determined strand reliability ($\sigma = 0.82$). The first item in this stand addressed flexibility in entrance requirement options, including whether barriers influenced non-biased admissions policies ($n = 236; \bar{x} = 2.85; \sigma = 1.29$). The second item considered advising procedures and whether advising occurred early and frequently ($n = 235; \bar{x} = 3.27; \sigma = 1.31$). The third item regarded the types of assessments used in the program for entrance, duration of the program, exit, and certification ($n = 234; \bar{x} = 2.50; \sigma = 1.30$). The last item addressed the availability of free programs to assist with academic needs ($n = 235; \bar{x} = 2.87; \sigma = 1.37$). See Table 7.

Table 7: Strand #5, Academic Support: Two-Way ANOVA

Strand #5: Academic Support	Non-Diverse		Diverse			F _{div}	F _{hear}	F _{div} x F _{hear}	
Priority Area	Hear	Deaf	Hear	Deaf					
Flexibility in Entrance Requirement Options	n	131	60	21	22	F	1.96	10.14*	1.85
	\bar{x}	2.58	3.53	2.57	2.95	df	1	1	1
	σ	1.27	1.08	1.50	1.05	p	0.16	0.00	0.18
Availability of Early and Frequent Advising	n	131	59	21	22	F	0.19	5.0	0.04
	\bar{x}	3.10	3.64	3.05	3.50	df	1	1	1
	σ	1.34	1.21	1.36	1.19	p	0.66	0.03	0.84
Alternative Methods of Assessment Available	n	130	59	21	22	F	0.10	33.32*	0.14
	\bar{x}	2.05	3.27	2.10	3.36	df	1	1	1
	σ	1.24	1.30	1.22	1.26	p	0.76	0.00	0.91
Availability of Free Programs to Assist with Academic Needs	n	131	60	21	21	F	0.57	16.38*	0.03
	\bar{x}	2.59	3.47	2.38	3.33	df	1	1	1
	σ	1.32	1.20	1.47	1.35	p	0.45	0.00	0.87

*Denotes statistical significance at a 95% confidence interval; $p < .05$.

Collectively, the sample rated “Flexibility in Entrance Requirement Options” item as having *moderate importance*. Hearing respondents rated flexibility in entrance requirements as *low importance*. Deaf + non-diverse rated the item as *high importance* while deaf + diverse rated it as *moderate importance*. A two-way ANOVA revealed significant main effects for hearing-status $F(1, 1) = 10.14, p = 0.00$. No significant effect was identified for and diversity $F(1, 1) = 1.96, p = 0.16$ or interaction effect $F(1, 1) = 1.85, p = 0.18$. Collectively, the sample rated “Alternative Methods of Assessment” as having *low importance*. Both groups of hearing respondents rated this item as *low importance*, while deaf respondents rated it as *moderate importance*. A two-way ANOVA revealed significant main effects for hearing status $F(1, 1) = 33.32, p = 0.00$ and no significant effect was identified for and diversity $F(1, 1) = 0.10, p = 0.76$ or interaction effect $F(1, 1) = 0.01, p = 0.91$.

The sample collectively rated “Availability of Early and Frequent Advising” as having *moderate importance*. Both groups of hearing respondents rated early and frequent advising as *moderate importance*. Deaf participants rated it as *high importance*. A two-way ANOVA revealed significant main effects for hearing status $F(1, 1) = 5.04, p = 0.03$ and no

significant effect was identified for and diversity $F(1, 1) = 0.19, p = 0.66$ or interaction effect $F(1, 1) = 0.04, p = 0.84$. Collectively, the sample rated “Availability of Free Programs to Assist with Academic Needs” as having *moderate importance*. Hearing groups rated the availability of free programs to assist with academic needs as *low importance*, whereas deaf groups rated it as *moderate importance*. A two-way ANOVA revealed significant main effects for hearing status $F(1, 1) = 16.38, p = 0.00$. No significant effect was identified for and diversity $F(1, 1) = 0.57, p = 0.45$ or interaction effect $F(1, 1) = 0.03, p = 0.87$.

Strand #6: Program Reputation

Program reputation comprised the final strand. The first recruitment priority addressed respondents’ perceptions of faculty skill and expertise, specifically within the field of Deaf Education ($n = 236; \bar{x} = 4.35; \sigma = 0.96$). The second, and last item in the strand, included comments from current students and program alumni ($n = 233; \bar{x} = 3.44; \sigma = 1.22$). An evaluation of Cronbach’s alpha determined strand reliability ($\sigma = 0.36$). Reliability in this strand was much lower than in other strands, and therefore the two items may not be measuring the same type of information. See Table 8.

Table 8: Strand #6, Program Reputation: Two-Way ANOVA

Strand #6: Program Reputation		Non-Diverse		Diverse			F_{div}	F_{hear}	F_{div} $\times F_{hear}$
Priority Area		Hear	Deaf	Hear	Deaf				
Faculty Skill and Expertise in the Field of Deaf Education	n	132	59	21	22	F	2.16	0.21	0.00
	\bar{x}	4.27	4.36	4.52	4.59	df	1	1	1
	σ	1.09	0.80	0.75	0.73	p	0.14	0.65	0.96
Positive Comments from Students/Alumni	n	131	57	21	22	F	0.89	1.39	0.14
	\bar{x}	3.36	3.36	3.24	3.41	df	1	1	1
	σ	1.22	1.15	1.48	1.18	p	0.35	0.24	0.71

*Denotes statistical significance at a 95% confidence interval; $p < .05$.

Collectively, the sample rated “Faculty Skill and Expertise” as having *high importance*. This priority is the only survey item that received a rating of *very high importance* by any group. Additionally, faculty skill was rated as the highest priority item for groups of hearing + non-diverse, hearing + diverse, and deaf + diverse. For deaf + non-diverse, this was the third highest item, only a few hundredths of a point behind Curriculum Philosophy and

Language Policy. A two-way ANOVA revealed no significant main effects for hearing status $F(1, 1) = 0.21, p = 0.65$, diversity $F(1, 1) = 2.16, p = 0.65$ or interaction effect $F(1, 1) = 0.02, p = 0.96$. Collectively, the sample rated “Positive Comments from Students and Alumni” as *moderate importance*. The group of deaf + non-diverse respondents ($n = 57$), however, rated this area as having *high importance*. A two-way ANOVA revealed no significant main effects for hearing status $F(1, 1) = 1.39, p = 0.24$, diversity $F(1, 1) = 0.89, p = 0.35$ or interaction effect $F(1, 1) = 0.14, p = 0.71$.

Summary of Key Findings

Each of the six strands: Strand #1, Program Demographics; Strand #2, Cost of Attendance; Strand #3, Curriculum Components; Strand #4, Language Accessibility; Strand #5, Academic Support; Strand #6, Program Reputation, revealed program elements that were important to all respondents. For fifteen of the items, responses varied as a function of hearing status. Only one item varied as a function of diversity status, and none of the twenty-five items varied due to the intersection of hearing status and diversity status. Table 9 depicts the top items rated *high* or *very high* by participants disaggregated by hearing status and ethnicity.

Table 9: High or Very High Priorities, Disaggregated by Hearing Status and Diversity

Respondents	Top Priorities Rated as Very High or High by Respondents
Hearing + Non-Diverse	Faculty Skill and Expertise ($\bar{x} = 4.27$) Cost of Tuition ($\bar{x} = 3.94$) Scholarships and Grants ($\bar{x} = 3.69$) Location: State or Region ($\bar{x} = 3.63$)
Hearing + Diverse	Faculty Skill and Expertise ($\bar{x} = 4.27$) Cost of Tuition ($\bar{x} = 3.94$) Scholarships and Grants ($\bar{x} = 3.69$) Location: State or Region ($\bar{x} = 3.63$)
Deaf + Non-Diverse	Curriculum Philosophy ($\bar{x} = 4.43$) Language Policy ($\bar{x} = 4.40$) Faculty Skill and Expertise ($\bar{x} = 4.36$) Quality, Certification, and Availability of Interpreters ($\bar{x} = 4.20$) Language Accessibility in Academic Settings ($\bar{x} = 4.33$)

Deaf + Diverse	Faculty Skill and Expertise ($\bar{x} = 4.59$)
	Opportunities for Tuition Waivers ($\bar{x} = 4.35$)
	Opportunities for Scholarships and Grants ($\bar{x} = 4.23$)
	Language Policy ($\bar{x} = 4.05$)
	Integration of Technology ($\bar{x} = 4.05$)

The top priorities of hearing students and deaf students diverged noticeably. Examination of responses from deaf students revealed four priorities that were not shared by hearing students. Deaf and hard of hearing students ($n = 84$) rated tuition waivers as a priority, perhaps because they are more likely to receive them. They also rated campus-friendly environment, curriculum philosophy, and communication policy/language use among their priority areas, indicating that communication access was a key consideration. Hearing students ($n = 116$) rated cost of tuition, academic rigor, and quality of practicum as high priority, items that deaf or hard of hearing respondents did not rate as a priority.

The priorities of both diverse and non-diverse students differed considerably. Study findings revealed commonalities and differences between the two groups' top priorities. Diverse participants and non-diverse participants identified three common priorities: faculty expertise, availability of scholarships, and curriculum philosophy.

Four items were not shared by the two groups. Academic rigor and tuition waivers were cited as key considerations by diverse students, where as non-diverse students rated location of program and communication policy/language use as priorities.

These data, while representative, are disproportionate. The composition of survey participants was overwhelmingly non-diverse ($n=201$), which was expected given the population of preservice teachers. Ethnically diverse respondents ($n=39$) represented only 16% of the total number of participants. Although the data are disproportionate, any study of this type will involve a limited number of diverse respondents due to the overall demographic of preservice teachers. Despite this limitation, researchers hope that the recruitment findings provided will serve as a springboard for further development, field-testing, and refinement of recruitment strategies.

The most significant finding of this study identified faculty expertise as the top priority area among all four groups. We did not anticipate this result; it was not reported in previous studies that were reviewed. This outcome, however, points to a key determiner for prospective students. Clearly, preservice teachers in deaf education place considerable weight on individual faculty and form impressions regarding their expertise and reputation in the field prior to enrolling in a particular program.

Call to Action

Recruitment in deaf education is time-intensive; it requires personalization, repetition, collaboration, and knowledge of the community and student needs. Throughout the study, we solicited feedback from programs with successful recruitment plans and suggest that programs:

- Discuss diversity issues with colleagues and determine a specific plan of action that will work for your specific program
- Create a culturally supportive environment within your program by getting feedback from current or former students. Consider conducting a focus group or distributing a survey to students to ascertain the level of support perceived by students.
- Discuss with colleges recruitment & retention efforts that consider priorities of diverse students, as revealed in this study.
- Focus recruitment efforts within diverse regions or in school districts who may struggle to hire fully credentialed teachers.
- Capitalize on student networks. Current and former students are often the best recruitment tool.
- Conduct personal interviews with all potential candidates. Be sure to highlight programmatic strengths and be genuinely interested in candidates' unique needs. Be honest about expectations and the realities of what your program can and cannot offer.
- Promote cultural sensitivity, social justice, & equity in the curriculum by incorporating concepts into coursework. Create sensitive teachers and leaders by engaging students in meaningful discourse. Collaborate with and support K-12 programs serving diverse learners

Though it is more challenging to recruit, prepare, and retain diverse students in the field of deaf education, the benefits of increasing teacher diversity are substantial. It has been more than a decade since Richard Riley, United States Secretary of Education, stated, "Our teachers should be

excellent and they should look like America” (1998). Yet there is still much effort needed to achieve his goal.

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