Identification of Gifted English Learners: An Empirical Examination of Three States[1]

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Objectives/Purpose

While English language learners (ELs) are the fastest growing population of students in the United States and represent nearly 10% of student enrollment, they are under-identified for gifted programs (NCES, 2013). The goal of the current study was to examine the extent to which EL students are under-identified as gifted in three states that mandate that school districts both identify and serve gifted students. Additionally we explored the role of district level practices in EL identification.

Perspectives/Theoretical Framework

Research suggest that the proportion of ELs in gifted education classrooms does not reflect their proportion in general student enrollment (Siegle et al., 2016). According to the Office of Civil Rights (2012a; 2012b), ELs constitute approximately 9.6% of overall school enrollment but only 2.7% of enrollment in gifted/talented programs. To date, no published research empirically investigates factors related to EL identification for gifted programs. Rather, research on student identification typically focuses on identification rates between racial groups. Further, this research utilizes school level data as a proxy for student level identification, which can have negative implications for the interpretation of findings (Freedman, 1999).

Regarding best practices, there is some evidence that certain practices can help enhance EL identification rates such as professional development (Esquierdo & Arreguín-Anderson, 2012) and assessment of students in their native language (Harris et al, 2007). However, research that empirically examines the relation between practices and student-level EL identification could not be located.

Methods

Three waves of student-level data were collected from three state departments of education. Each state's education policy requires the identification of gifted students, though specific identification criteria vary both across and within states and across local education agencies within those states. Data from a cohort of students who entered 3rd grade in 2011 and finished 5th grade in 2014 were analyzed in this study. To examine the degree to which EL students were identified as gifted, we conducted a series of three-level (student-school-district) logistic regression models, where students' identification status at grade 5 was the outcome variable. Student race, eligibility for free and reduced lunch, gifted status and achievement scores were utilized at level 1. Achievement scores were grand mean centered; dichotomous variables were dummy coded and added to the model uncentered. At level 2, we included school-level variables. These included the school percentage of FRL eligible students, the percentage of students identified as gifted at grade 5, schools' average reading achievement, and schools' average math achievement. All continuous variables were grand-mean centered at

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level 2. At level 3, we included district-level variables. These included district percentage of FRL eligible students, percentage of students identified as gifted at grade 5, districts' average reading achievement, districts' average math achievement, and districts' percentage of underrepresented students. These variables were grand-mean centered. At levels 2 and 3, we either utilized school and district averages of these variables (in States 1 and 3) or aggregated student variables to represent school and district estimates (in State 2), depending on the availability of data.

Data Sources

Three waves of data from state databases from 2011 to 2014 were utilized to model student identification for gifted programming. State 1 contained 69,938 students nested within 1,034 schools across 181 districts. State 2 contained 168,444 students across 2,194 schools within 73 school districts. State 3 contained 93,671 students nested within 1,381 schools nested across 193 school districts. District data were also utilized to explore the relation between district practices and student identification. Five district practices were of particular interest in the current study: 1) assessing ELs in their native language; 2) modifying the identification process for underserved populations; 3) offering professional development on the use of referrals, nominations or rating scales; 4) offering professional development on how to recognize giftedness in traditionally underserved populations; 5) the use of universal screening.

Results

After controlling for students' 3rd grade math and reading achievement, student demographics, school and district SES, school and district achievement, and the percentage of gifted and underrepresented students in the school and district, students' language status seem to vary in its relation to gifted identification across the three states of interest. While EL status was positively related to gifted identification in State 1, EL status was negatively related to identification in State 2, and not significantly related to identification in State 3. In State 2, the district practice of offering professional development that helped teachers identify gifts in traditionally underserved populations was positively associated with EL identification. This was not the case for States 1 and 3. Other district practices were not significantly associated with the rate at which EL students were identified for gifted programs.

Discussion and Significance

Our methodology allowed us to go beyond marginal comparison of rates of identification by comparing students with identical achievement and demographic profiles. The results reveal a surprising finding: the under-identification of EL students may be a function of context and, in the current study, varies by state. Further investigation is necessary to understand what contextual factors might moderate the impact of language proficiency on gifted identification. There is also evidence that district practices are positively related to the

identification of EL students, although this finding was not consistent across all three states. Professional development around the identification of students from traditionally underserved populations was found to be positively associated with the EL slope in State 2. This finding suggest that even though EL status was negatively related to identification in State 2, implementing professional development may help to mitigate the impact of language proficiency in some contexts. It is possible that professional development that is specifically related to identifying gifts in EL students is needed to see the impact on EL identification (Esquierdo & Arreguín-Anderson, 2012). The current study is the first of its kind to use student level data to examine the phenomenon of EL identification for gifted. Implications for the research and practice will be discussed.

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Table 1

Summary of PQL Estimates for Three-Level Model of 5th Grade Gifted Identification

	Final Model (State 1)		Final Model (State 2)		Final Model (State 3)	
Parameter	Parameter estimate	SE	Parameter estimate	SE	Parameter estimate	SE
Fixed effects						
Intercept	*-3.71	0.32	-3.46	0.06	*-3.69	0.09
Under (Black or Hispanic)	*-0.17	0.06	-0.30	0.05	*-0.27	0.05
FRL status	-0.22	0.13	0.00	0.10	*-0.55	0.03
ELL status	*0.24	0.09	*-1.41	0.16	-0.08	0.08
PD_underserved	*NS*		*1.02	0.17	*NS*	
Reading	*0.02	0.00	*.06	0.00	*0.18	0.01
Math	*0.02	0.00	*0.05	0.00	*0.24	0.01
School-level						
% Under	-0.37	0.43	0.12	0.14	-0.22	0.13
% FRL	0.01	0.00	-0.27	0.18	0.23	0.26
% ELL	0.00	0.00	0.36	0.16	0.43	0.22
% Gifted	*0.10	0.01	*10.92	0.40	*9.95	0.41
Reading	-0.01	0.00	*-0.04	0.00	*0.065	0.02
Math	0.00	0.00	*-0.06	0.00	0.03	0.01
District-level						
% Under	-0.19	0.03	*-1.52	0.38	-0.05	0.25
% FRL	-0.01	0.01	0.08	0.70	*1.79	0.42
% ELL	0.03	0.01	*2.39	0.73	-1.08	0.55
% Gifted	*0.19	0.03	*5.17	1.49	*15.12	0.84
Reading	0.01	0.01	*-0.06	0.02	0.01	0.05
Math	-0.01	0.01	*0.04	0.01	0.05	0.04
Variance estimates						
tau (pi)	0.61	0.05	0.03	0.01	0.02	0.01
tau (beta)	0.25	0.07	0.03	0.01	0.08	0.02
	SD	Variance Component	SD	Variance Component	SD	Variance Component
r0	0.78	0.61	0.17	0.03	0.12	0.02

u00	0.50	0.25	0.18	0.03	0.27	0.08

Note: *p<.01

Model with robust standard errors
School level variables were group-mean centered; District level variables were grand-mean centered; Student level achievement was group-mean centered