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**LOCAL NORMS AND GIFTED AND TALENTED IDENTIFICATION IN
ARKANSAS: CAN IT HELP IMPROVE STUDENT DIVERSITY?**

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Executive Summary

In the past decades, the gifted and talented (G/T) community has wrestled with an important question about improving equity: How can we best use research to increase student diversity in G/T education? There are many suggestions for answering this question but using local norms, where students are selected based on comparisons with others from a similar school context using traditional measures, has attracted much attention. In some districts, using local norms and universal screening has greatly improved student diversity, whereas, in other districts, the findings have been unclear. Thus it seems useful to study local contexts. In this study, we leveraged Arkansas' administrative data to answer a similar question: "Would using district/school assessment norms improve student diversity in G/T identification in Arkansas?" We found no consistent evidence that using district/school norms would improve racial and programmatic diversity (i.e., special education students, English language learners, and students from low-income and minority backgrounds). We still urge school districts, however, to consider employing local norms in identifying G/T students as it would limit human errors in identification and increase the alignment between students' academic aptitude and G/T services, especially for students of racial and demographic groups that the current system has identified successfully.

I. Introduction

Students' representation in gifted and talented (G/T) education has long been studied. One common concern is the underrepresentation of minority students (Callahan, 2005; Plucker & Peters, 2016; Yaluma & Tyner, 2021), such as students of color, students who are English language learners, and students from low-income families (Grissom & Redding, 2016; Gubbins et al., 2020; Harris et al., 2009). Improving the representation of such groups becomes relevant to the sustainable development of society as these are the people who may best understand the needs of their communities. The drive for social justice, therefore, justifies improving the diversity in G/T identification and education both for the personal flourishing of these students but also for the benefit for society.

Card and Giuliano (2016) conducted a quasi-experimental study suggesting that universal screening may increase diversity in G/T identification. Universal screening means “data are collected on all students at one or more grade levels” (Gubbins et al., 2020, p. 341). Many researchers have advocated for using local norms in concert with universal screening (Peters et al., 2019; Peters et al., 2021; Peters & Engerrand, 2016). Local norms mean emphasizing the local context of school districts or school buildings (Lohman, 2005; Lohman & Gambrell, 2012; Peters et al., 2019, 2021).

Regarding G/T identification in Arkansas, Tran et al. (2022) found that high-achieving students from low-income families are 50% less likely to be identified as G/T by 4th grade than similarly high-achieving students from more affluent backgrounds. In this study, therefore, leveraging administrative data in Arkansas, we examined whether using local norms in tandem with universal screening would improve the identification rates of underrepresented students

compared to the current identification practices. In the next sections, we present relevant literature, our methods, results, discussion, and a conclusion including policy implications.

II. Relevant Literature

Local Norms

Local norms is an approach to identify G/T students emphasizing the local context of school districts or school buildings (Peters et al., 2019; Peters et al., 2021). In this approach, students are ranked and selected for G/T services at the local level based on their composite achievement scores (Peters et al., 2021). Technical and practical details on how to use local norms in selecting G/T students can be found in McBee and Peters (2019) or visit <https://osf.io/2pqmj/>. In some cases, the local norm approach has been found to substantially increase rates of gifted identification for traditionally underrepresented students compared to using national norms (Lohman, 2005; Lohman & Gambrell, 2012; Peters et al., 2019, p. 15; Peters & Gentry, 2012).

G/T Identification and Education in Arkansas

All Arkansas public schools are required to provide G/T services (Arkansas Department of Education, 2009). Arkansas' Department of Education's rules define G/T students in the following way:

Gifted and talented children and youth are those of high potential or ability whose learning characteristics and educational needs require qualitatively differentiated educational experiences and/or services. Possession of these talents and gifts, or the potential for their development, will be evidenced through an interaction of above-average intellectual ability, task commitment and /or motivation, and creative ability (Arkansas Department of Education, 2009).

The G/T identification process includes several steps and can occur at any level from kindergarten to 12th grade. Under current practice, students must first be nominated for consideration as qualifying for G/T. This nomination can come from various sources, including teachers, parents, or counselors. Following a nomination, data must be collected on the student including, per state requirement, at least two objective and two subjective measures with at least one of the objective measures being a creativity assessment. A committee consisting of at least five professional educators chaired by a trained specialist in gifted education then decide whether to place the student in G/T programs based on the collected information. This committee can be per school within the district and/or at the district level with representatives from each campus (Arkansas Department of Education, 2009).

The state provides guidelines and encourages their use, but ultimately it is the local school district that determines the G/T identification process. There is no consistently applied standard across the state to identify a student as G/T. In addition, districts have the autonomy to determine whether they will honor the gifted identification of a student that transfers from another district in the state. Selection criteria, therefore, are district-dependent with guidance from the state. Districts also determine the design and delivery of G/T services for identified students. G/T services vary widely across the state, but especially in the secondary setting, ranging from a G/T seminar or honors courses to advanced placement, such as AP/Pre-AP/Concurrent classes. There is no uniform way, however, that districts meet the needs of G/T students as local decisions lead to the implementation of services.

A district's gifted program must have an annual evaluation through a state program approval report (Arkansas Department of Education, 2009). G/T teachers must pass the Gifted Education Praxis Examination and meet licensing standards for an add-on endorsement/licensure

in gifted education (Arkansas Department of Education, 2009). Once a student is identified as G/T, unless they change school districts or ask to exit the program, the student retains the G/T label throughout their school years.

Few studies have examined G/T education and identification in Arkansas. Limited research has studied the effectiveness of G/T teacher training programs and early STEM interventions (Robinson et al., 2018; Robinson et al., 2014; Robinson et al., 2009). Regarding identification, Tran et al. (2022) was among the first to study the question of G/T identification in Arkansas. Tran et al. (2022) found that students from low-income families are 50% less likely to be identified as G/T by 4th grade even if they scored in the top 5% statewide on both math and English Language Arts (ELA) state assessment tests in 3rd grade. Regarding the correlation between G/T status and academic achievement, Tran et al. (2021) found that G/T status had a positive correlation with academic growth and achievement among high aptitude students. Thus, local norms might be a way to expand identification to more diverse students ready to benefit from advanced programming.

There are two main findings from the limited studies about G/T identification and education in Arkansas. First, there is a concern about the underrepresentation of low-income students with high academic aptitude. Second, given the positive correlation between G/T status and academic achievement among high aptitude students, how can we extend the identification to serve a greater number of deserving students? It is against this background that we decided to investigate if using a local norms approach would help identify more racially diverse students and students from low-income backgrounds including English language learners and students with special education needs.

III. Method

Data

We leveraged the state of Arkansas' education administrative data between the 2009 and 2019 fiscal years. The dataset contains anonymized student-level data for both students' demographic and programmatic characteristics, i.e., special education students, English language learners, and students from low-income and minority backgrounds, as well as scores on state assessments. We rely on the 3rd grade and 4th grade data of all students in Arkansas as 3rd grade is the first statewide assessment and the majority of G/T students are identified by the 4th grade. In particular, for the 3rd grade, we use both demographic and achievement data to study top-ranked students. For the 4th grade, we use demographic data to study those students who were identified as G/T. Demographic and programmatic characteristics include free-and-reduced-price lunch (FRL) status, special education (SPED) status, English language learner (ELL) status, race and ethnicity, and gender. The descriptive summary for 3rd grade students is presented in Table 1, while the descriptive summary for all 4th grade G/T students in the consecutive year is presented in Table 2.

As can be seen in Table 1, a majority of Arkansas' 3rd grade students (approximately two-thirds) are from low-income families and are eligible for free- or reduced-price lunch (FRL). About 10% of all students are students with special needs (SPED), and 6-9% of all students are English language learners (ELL). Approximately 60% of 3rd grade students are White, about 20% of students are Black, and the Hispanic student population increased over the years to approximately 14% in the 2018-19 school year. Slightly under 50% of 3rd grade students are female.

Table 2 reports the demographics of all G/T students identified in 4th grade of the following year.

Table 1

Summary statistics of all third-grade students' demographics (limited to students with both math and ELA records), percent

	FRL	SPED	ELL	White	Black	Hispanic	Other race	Female	N
2008-09	62.2	10.0	7.5	66.3	22.1	9.3	2.4	49.3	35,130
2009-10	64.5	10.6	7.8	64.9	21.6	9.8	3.6	48.7	35,992
2010-11	65.0	10.7	8.4	64.2	21.0	10.8	4.0	49.1	35,440
2011-12	65.5	11.0	8.8	63.7	20.3	11.4	4.6	48.5	35,537
2012-13	64.8	11.2	8.6	63.6	20.1	11.1	5.2	49.3	35,069
2013-14	64.9	11.5	8.8	62.8	20.2	11.9	5.0	48.9	34,603
2015-16	67.5	9.0	6.1	60.7	20.4	13.4	5.5	49.3	37,594
2016-17	68.3	9.3	6.3	60.0	21.0	13.2	5.8	49.2	37,684
2017-18	67.3	10.3	7.1	59.9	20.2	14.0	5.9	48.5	37,027

The proportion of low-income (FRL) students has increased over the years. In the 2018-19 academic year, slightly under 50% of all G/T students are from low-income families, and increase of nearly 11 percentage points since 2009-10. SPED and ELL students consistently account for a small proportion of all G/T identified students. White students are the majority of identified students, which, at 68%, is higher than the proportion of the general student population that is white in Arkansas (60%). Conversely, Black and Hispanic students are identified at a lower rate than their proportions of the student population. Female students are identified as G/T at a higher rate than the rate in the general student population (53% compared to males at 47%).

Table 2*Summary statistics of all fourth-grade G/T students' demographics, percent*

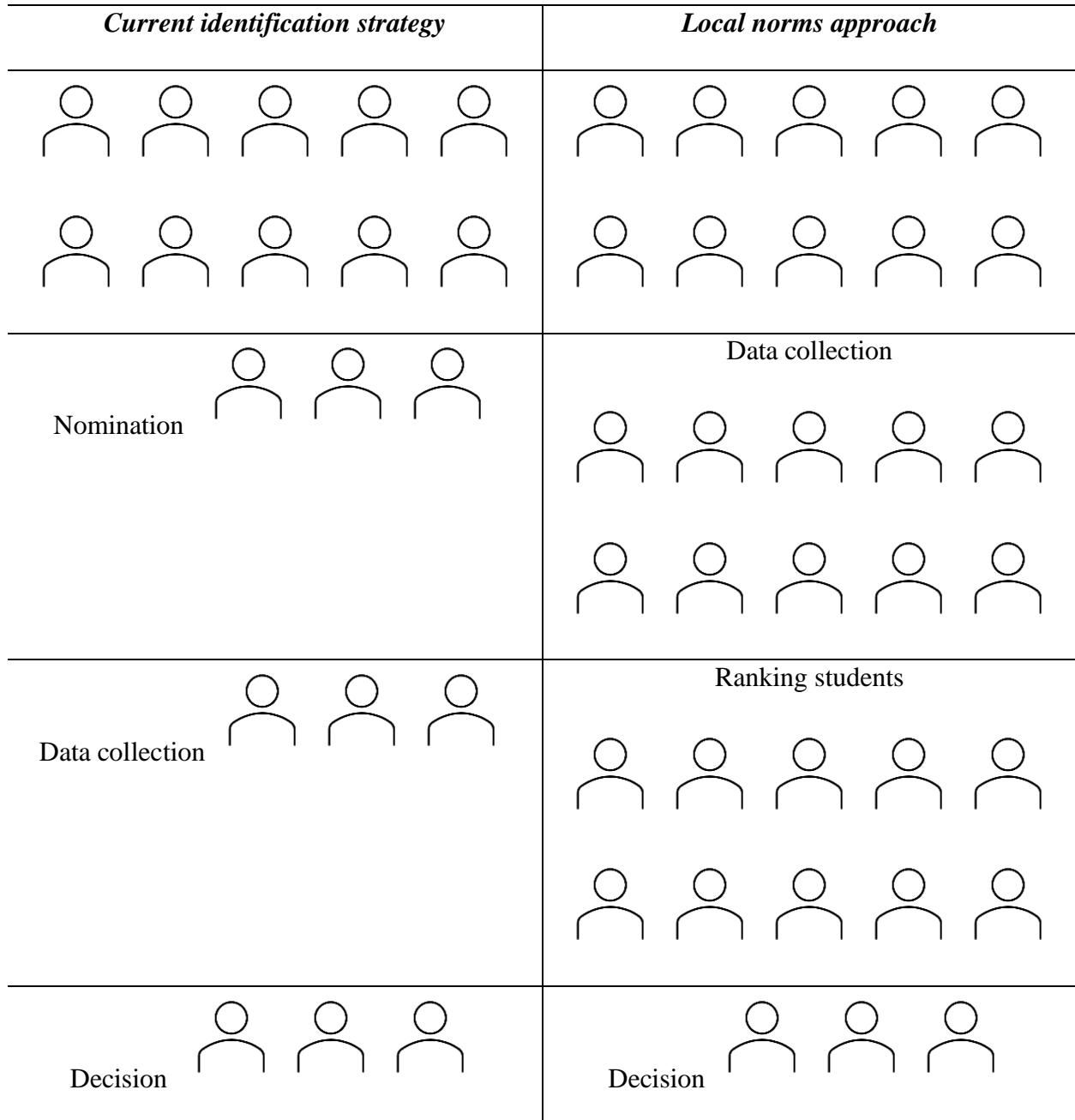
	FRL	SPED	ELL	White	Black	Hispanic	Other race	Female	N
2009-10	38.4	1.6	2.7	74.1	16.9	5.0	4.0	55.4	4,220
2010-11	40.1	1.9	3.2	74.0	16.3	5.3	4.3	53.7	4,164
2011-12	41.3	1.8	3.9	71.5	17.5	6.4	4.7	52.9	4,413
2012-13	42.0	1.8	4.1	71.5	16.6	7.0	4.9	53.3	4,494
2013-14	41.3	2.0	3.7	69.9	17.4	7.1	5.6	53.8	4,610
2015-16	42.0	1.8	3.5	71.5	16.4	6.8	5.3	53.2	4,325
2016-17	46.5	1.7	4.1	68.8	16.8	5.6	5.9	54.2	4,252
2017-18	46.2	1.8	3.0	66.2	17.0	9.6	7.2	53.2	4,186
2018-19	49.2	2.4	1.9	67.9	14.9	9.7	7.5	53.0	4,116

Analytical Strategy

Using the state's administrative data, we are able to study the entire population of Arkansas public school students. Our findings are thus close to population parameters for the time period studied, leading us to conduct a descriptive statistical analysis using this dataset rather than utilizing inferential statistics. The goal of the descriptive approach is to describe the population of students within a school district using the current G/T identification schemes compared to the population that would be identified by using the local norm approach (see Figure 1).

Figure 1

Comparing AR current identification strategy and a local norms approach



To examine differences in the diversity of students identified as G/T under the current system and the local norms approach, we need to identify the resources available at each school to serve G/T students, create a composite score to identify students that would be identified as G/T under local norms, and compare the demographic and programmatic characteristics of the students identified under the current system with those of students we identified using the local norms approach.

First, we examined the demographic and programmatic characteristics of 4th grade G/T identified students in each year and school district. We chose 4th grade because between 3rd and 4th grade, the total number of G/T jumped by 149% and by 4th grade approximately 87% of all G/T students were identified on average across Arkansas. This step generates the demographics of G/T students under the current identification scheme as well as the number of G/T identified 4th grade students each school district has. We used the number of students currently identified as G/T to represent available G/T resources (seats) at the district and school levels. As recommended in the local norms approach by Peters et al. (2021), we have two options: using a cut-score/percentile or using the number of available G/T seats. There is no available cut-score or determined percentile to screen G/T students in Arkansas. We, therefore, use the number of identified G/T students in 4th grade as a proxy for available G/T seats.

We then created a composite score for each 4th grade student using the previous year's 3rd grade achievement on statewide math and ELA exams, and ranked students within each school or district by the composite score. Using the number of 4th grade G/T students in each district as a proxy for the number of available seats, we identified "local norms G/T" students, selecting students from the ranked list until the available G/T seats were filled. We examined the

demographic and programmatic characteristics of the students that would have been selected using local norms.

Finally, we compared the status quo identified and local norms identified students to determine if there was any difference regarding students’ socioeconomic status, English language learner status, special education status, race, or gender. We conducted this descriptive analysis for nine cohorts of 3rd and 4th grade students at the district level. In Arkansas, 78% of school districts have only one school serving 4th grade students. For the 10 largest school districts, we conducted an additional analysis using local school norms.

We use the term “cohort” to represent different years of comparison. A “cohort” is defined as the combination of top-ranked students in 3rd grade and G/T students in 4th grade in the following year. For example, Cohort 1 includes top-ranked students in 3rd grade in 2008-09 and G/T students in 4th grade in 2009-10 (see Table 3). We conducted both cross-sectional and pooled analyses in the study. In cross-sectional analysis, we examine the differences for each Cohort. In the pooled analysis, we calculated the average demographic and programmatic changes for all nine cohorts.

Table 3
Cohort definition

	Cohort 1	Cohort 2	Cohort 3	Cohort 4	Cohort 5	Cohort 6	Cohort 7	Cohort 8	Cohort 9
3 rd grade	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2015-16	2016-17	2017-18
4 th grade	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2016-17	2017-18	2018-19

We also investigated the potential change in gifted identification rates for various groups using school norms at the 10 largest school districts in Arkansas, namely Little Rock, Fort Smith, Springdale, Rogers, Pulaski County Special, Bentonville, Conway, Cabot, North Little Rock, and Fayetteville. Within the 10 largest school districts, there were significant differences among schools regarding student demographic and programmatic characteristics. Therefore, we used school norms for these school districts to capture the changes in identification rates that district norms may not be able to achieve.

IV. Results

In Table 4, we reported school district counts for each cohort, whether the change by using local norms was negative, null, or positive. Table 5 shows the mean comparison of student demographic characteristics using the district norms approach and the current system. Positive changes indicate positive effects of using a district norm approach to increase G/T student diversity and vice versa. We found that, across nine cohorts, there was no consistent evidence that using a district norm approach would increase the racial or programmatic diversity of students identified as G/T except for the proportion of female students. Using district norms would increase the number of female students in identified students in six of the nine examined cohorts. This pattern is not, however, present for most of the recent cohorts (Cohorts 6-8). Female students, on the other hand, are over-represented in G/T education, as shown in Table 2. Looking at cohort specifics, we found that in Cohort 4 using the district norm approach would decrease student diversity in terms of race, socioeconomic background, and educational needs. In the most recent cohort, Cohort 9, we found that using district norms would increase the G/T identification rate of students with special needs, English language learners, and female students.

Table 4*District counts for change (local norms – current identification rate) in Arkansas, percent*

Cohort	1		2		3		4		5		6		7		8		9	
	–	+	–	+	–	+	–	+	–	+	–	+	–	+	–	+	–	+
FRL	29.6	36.3	15.0	44.1	26.0	45.8	79.1	15.1	21.0	49.6	28.5	39.8	26.0	41.6	25.1	40.5	23.1	33.9
SPED	8.4	12.8	7.5	15.4	5.7	17.6	93.8	5.3	10.7	14.7	9.0	16.7	15.1	2.3	17.2	1.4	21.7	1.4
ELL	7.1	5.8	5.7	5.3	6.2	6.2	48.4	4.4	7.1	7.1	9.5	8.6	7.8	9.1	6.0	7.9	2.7	13.1
White	17.3	31.9	22.0	26.0	19.8	20.7	22.2	72.0	27.7	21.4	25.8	24.9	24.7	25.1	23.7	29.3	20.8	27.1
Black	17.7	13.3	16.7	12.8	12.8	12.8	58.7	6.7	14.7	14.7	16.3	10.9	16.4	14.2	15.8	11.6	9.5	12.7
Hispanic	15.9	13.3	11.5	14.5	11.0	16.3	60.4	16.4	13.8	12.9	14.5	19.0	13.7	16.4	18.1	14.0	19.5	15.8
Other race	17.7	7.1	12.8	8.4	15.9	6.6	47.1	28.4	9.4	17.9	11.8	15.8	12.8	15.5	12.1	18.6	20.4	9.5
Female	24.8	45.1	22.5	47.6	25.1	44.5	20.4	78.2	21.4	53.6	24.4	47.1	35.2	34.7	27.0	41.4	75.1	40.7
Total districts	226		227		227		225		224		221		219		215		221	

Note: “–” indicates a negative change, “+” indicates a positive change. All negative changes are grey shaded.

Table 5*t-tests for mean comparisons on student demographics (mean difference = local norms – current identification rate), district level*

Cohort	FRL	SPED	ELL	White	Black	Hispanic	Other race	Female	N
1	.013 (.027)	-.002 (.005)	.000 (.004)	.030 (.020)	-.014 (.018)	-.003 (.007)	-.013** (.006)	.039** (.017)	226
2	.029 (.026)	.008 (.009)	.002 (.004)	.003 (.021)	-.002 (.020)	.005 (.007)	-.006 (.006)	.051*** (.019)	227
3	.047* (.026)	.013** (.007)	.001 (.004)	.003 (.021)	-.001 (.019)	.004 (.007)	-.006 (.005)	.042** (.018)	227
4	-.168*** (.020)	-.106*** (.008)	-.025*** (.007)	.080*** (.022)	-.063*** (.021)	-.026*** (.009)	.009 (.006)	.120*** (.014)	225
5	.066*** (.024)	.009 (.009)	.003 (.006)	-.006 (.020)	-.006 (.017)	.004 (.008)	.008 (.006)	.076*** (.017)	224
6	.015 (.026)	.007 (.004)	-.003 (.005)	.006 (.021)	-.007 (.019)	-.000 (.008)	.002 (.007)	.030 (.019)	221
7	.029 (.029)	-.011 (.007)	.001 (.005)	-.011 (.024)	-.001 (.022)	.011 (.010)	.001 (.006)	-.013 (.020)	219
8	.023 (.030)	.012* (.007)	.003 (.005)	-.005 (.025)	.004 (.021)	-.005 (.011)	.006 (.008)	.024 (.019)	215
9	.008 (.031)	0.014** (.007)	.013*** (.004)	.018 (.025)	-.002 (.022)	-.007 (.010)	-.009 (.007)	.034* (.019)	221

Standard errors in parentheses

*** p<.01, ** p<.05, *p<.1

We conducted a pooled analysis for all cohorts. As shown in Table 6, using district norms, on average, across nine cohorts, decreased the proportion of identified SPED students by one percent, and increased the proportion of female students by 4.5 percent. For other demographic and programmatic characteristics, we did observe statistically significant differences between students identified using local norms and students identified using the current selection mechanism.

Table 6

t-tests for mean comparisons on student demographics (mean difference = local norms – current identification rate) using district norms, pooled analysis

Demographics	FRL	SPED	ELL	White	Black	Hispanic	Other race	Female
Mean difference	.007 (.009)	-.012*** (.003)	.001 (.002)	.030 (.020)	-.010 (.007)	-.002 (.003)	-.001 (.002)	.045*** (.006)

Standard errors in parentheses

*** p<.01, ** p<.05, *p<.1

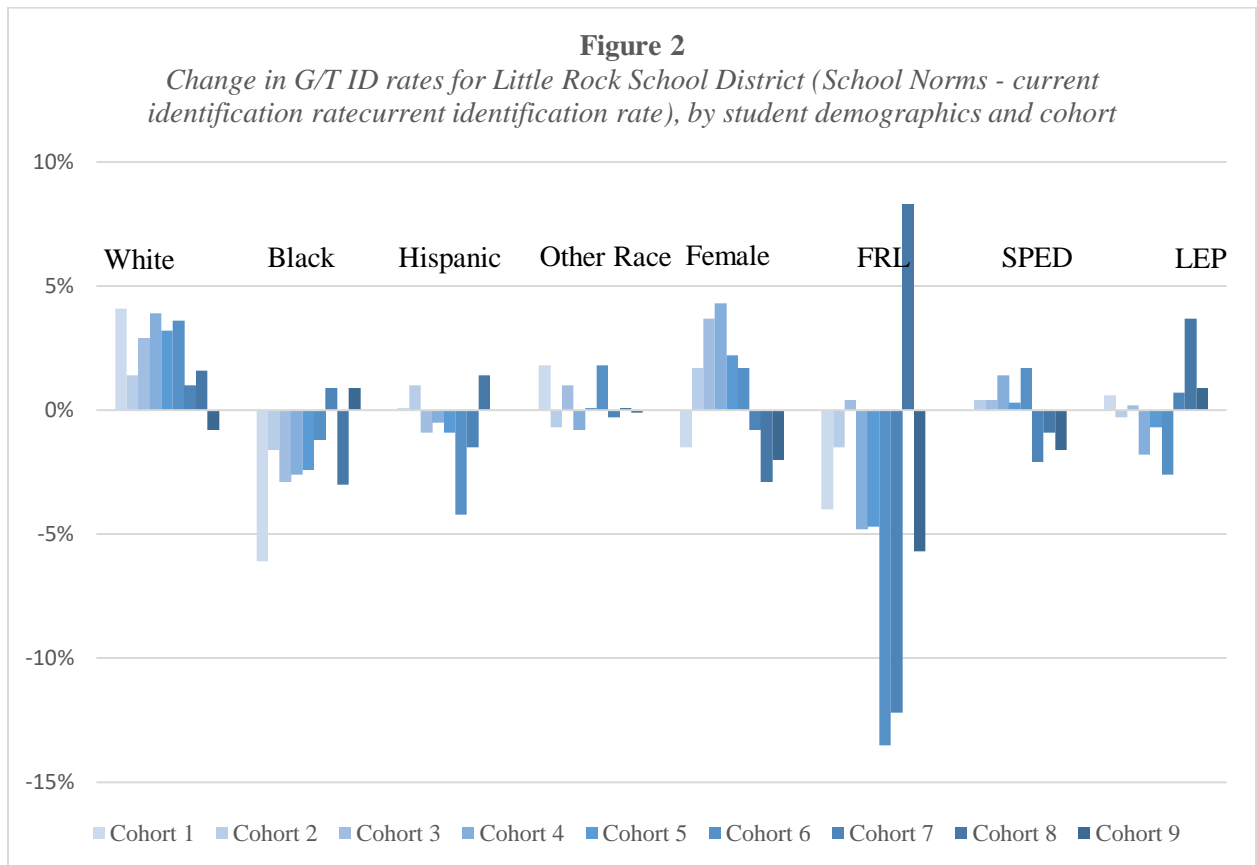
We also investigated ten school districts in Arkansas with the largest student enrollment using the school norm approach. The largest 10 school districts include Little Rock, Fort Smith, Springdale, Rogers, Pulaski County Special, Bentonville, Conway, Cabot, North Little Rock, and Fayetteville. With this selection of the largest ten districts, we ensured that we studied the most diversified districts in terms of student demographics. At the school level, we are also able to account for the fact that school buildings may be different from one another even though they are in the same district. Using school norms, therefore, may amplify the benefits of local norms that is not captured at the district level. In Table 7, we reported school counts in the 10 largest school districts: whether there was a negative, null, or positive change, in G/T student demographic and programmatic characteristics using school norms (see Supplement A for full statistical results). We did not find consistent patterns that using school norms would improve student racial or programmatic diversity among G/T students.

Table 7*School counts for change (local norms – current identification rate) – Largest 10 school districts, percent*

Cohort	1		2		3		4		5		6		7		8		9	
	–	+	–	+	–	+	–	+	–	+	–	+	–	+	–	+	–	+
FRL	28.8	32.2	31.7	28.3	32.4	33.1	37.6	22.1	32.5	39.1	34.5	36.5	31.2	34.1	18.6	44.3	42.4	38.1
SPED	7.5	12.3	8.3	15.2	9.5	14.2	10.1	15.4	15.2	9.3	8.1	14.9	20.3	3.6	16.4	5.0	25.9	2.9
LEP	11.6	17.1	11.7	14.5	12.8	18.9	14.1	14.8	10.6	25.8	16.9	22.3	12.3	19.6	7.9	25.7	9.4	23.7
White	17.8	36.3	23.4	36.6	24.3	38.5	22.8	43.0	30.5	37.1	29.1	31.1	26.1	31.2	32.1	31.4	38.8	39.6
Black	30.1	15.1	27.6	10.3	27.7	10.1	28.2	11.4	29.1	13.9	22.3	12.8	25.4	17.4	22.1	15.0	24.5	29.5
Hispanic	19.9	15.1	14.5	22.1	16.2	20.9	22.8	24.2	21.2	29.8	22.3	26.4	24.6	28.3	19.3	33.6	34.5	35.3
Other race	12.3	11.0	17.2	15.9	21.6	16.2	18.8	16.1	16.6	22.5	16.9	21.6	18.8	19.6	20.7	20.7	29.5	26.6
Female	28.8	39.7	29.0	44.8	29.7	40.5	22.1	47.0	23.2	50.3	29.7	45.9	36.2	39.8	27.9	37.1	37.4	55.4
Total schools	146		145		148		149		151		148		138		140		139	

Note: “–” indicates a negative change, “+” indicates a positive change. All negative changes are grey shaded.

Changes in the G/T identification rates for student demographic and programmatic characteristics between local norms and the status quo in the Little Rock school district are presented in Figure 2. Positive changes reflect increased identification rates using the school norm approach. We see that there was no consistently significant change in student demographics. Using school norms typically indeed reduced the proportion of low-income students with G/T identification; however, this result was not consistently statistically significant.



V. Discussion

Using local district norms and local school norms in identifying G/T students with the goal of increasing the G/T identification rates of underrepresented student groups would not be particularly successful in Arkansas. We did not find consistent patterns of change in student demographics across Arkansas nor in the 10 largest school districts, except for some pattern in the proportion of female students, which may mean many more females are indeed ready for more advanced programming, noting that female students are already over-identified. This finding may seem to undermine the argument for using local norms in G/T identification (Lohman & Gambrell, 2012; Peters et al., 2019; Peters & Gentry, 2012), at least in Arkansas. Local norms have enjoyed some hype in the last decade as the remedy for improving student diversity in G/T. Our research, however, shows that the success of using local norms to increase demographic and programmatic diversity profoundly depends on the local context. In Arkansas, for example, school segregation may limit the effect of local norms. No matter which method school districts use to select G/T students, if there is no diversity within the school district, the same demographic and programmatic students will be identified.

In addition, while it might be true that local norms may not change the current diversity, using local norms may in conjunction with universal screening help limit human bias in selecting students into G/T services. The current G/T identification system in Arkansas starts with a nomination. Researchers have found that nomination may have a negative impact on student diversity in G/T education (McBee et al., 2016). Using local norms will help to reduce human error in selecting students.

Although we did not find that using local norms would increase diversity in G/T education in Arkansas, the local norms approach allows identifying students with high academic aptitude who deserve G/T service as defined by the Arkansas Department of Education. Therefore, on the positive side, leveraging district norms in Arkansas will help increase the alignment of student aptitude and G/T

services. This alignment coupled with the positive correlation between G/T status and academic achievement (Tran et al., 2021) may lead to bigger impacts of G/T education in Arkansas to be more effective in supporting student learning. The key is to identify the students who will most benefit from G/T services and provide them with timely and appropriate education and training.

VI. Limitations and Future Research

We limited our analysis to 4th grade because by 4th grade, on average, 87% of all G/T students were identified in Arkansas. However, I also acknowledge that the remaining 13% may create a difference if students mainly come from underrepresented groups. However, the highest numbers of G/T students across Arkansas are mainly in 5th grade, then 7th and 6th grade. After that, the numbers decline (see Appendix Table 1). Future steps should look into this peak and decline trend and identify who enters and leaves the G/T services.

We are also limited by looking at math and ELA scores only to create composite scores and rankings for students. Other tests are being used to identify students in some school districts, such as the Cognitive Abilities Test or Measures of Academic Progress tests. Including other measures in creating the composite scores may allow more insights into the use and benefits of local norms in the context of local school districts in Arkansas.

VII. Conclusion

Using local norms may vary based on context, and thus, a state by state or a local analysis may be important to conduct to understand whether the strategy could be useful. This shows that theoretical approaches that seem to work broadly really need to be examined in specific contexts. Our study highlights this point, at least in the case of Arkansas. Better research needs to be conducted to solve problems on the ground.

In our study, we examined if using a local norm approach would improve the G/T identification rate of students, particularly programmatic groups, i.e., special education students, students with English language learners, and students from low-income and minority backgrounds. We did not find consistent evidence to support that using local norms would succeed in doing so. However, we believe that using district and school norms will allow for the identification of students with high academic appropriateness who are ready for G/T services. By identifying a broader range of students with academic aptitude ready for advanced programming in comparison to their local peers, we would improve the alignment between service and students, which will ultimately benefit students. We, therefore, urge school districts in Arkansas to consider this approach in identifying their G/T students as one possible tool in seeking to improve the identification and service of talented students across the state.

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