Examining Progress in English Language Acquisition via Student Growth Percentiles
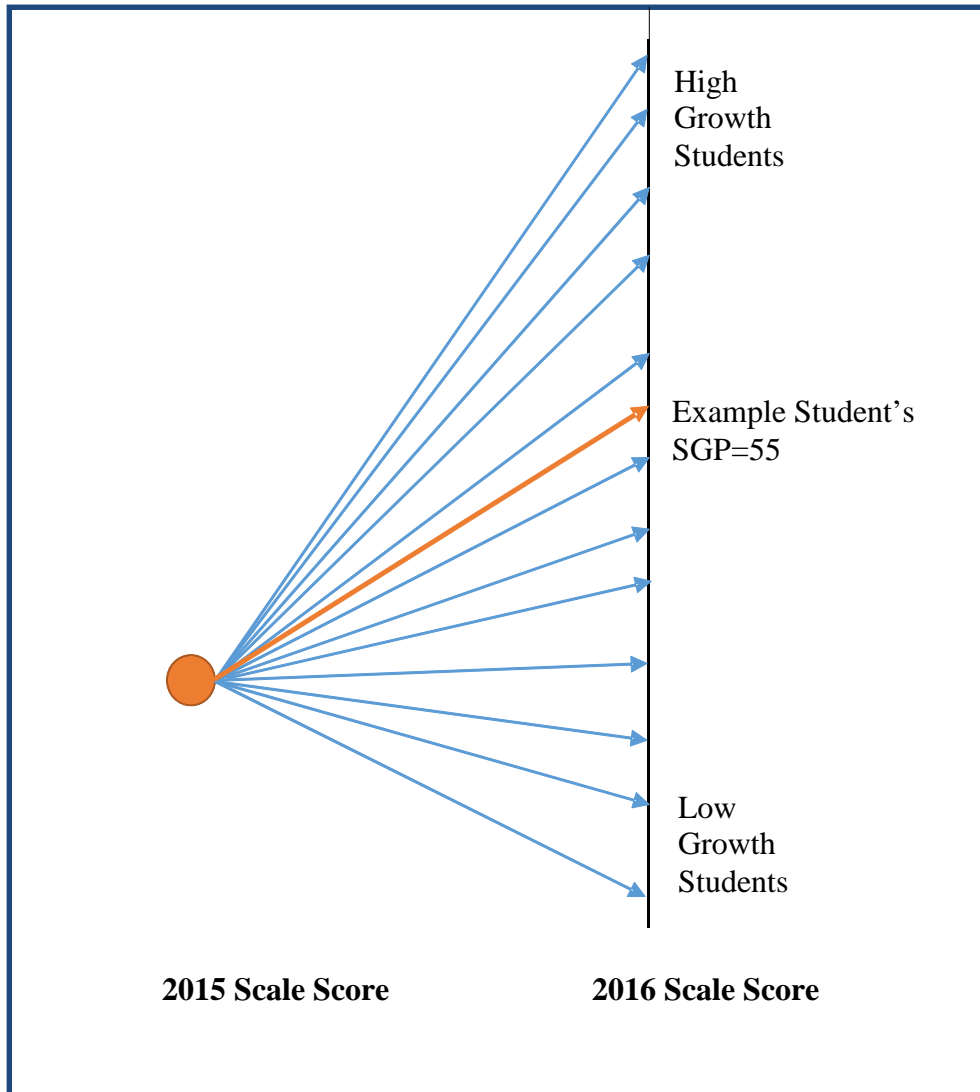
The goal of this Research Brief is to identify schools in which English Language Learners (ELLs) exhibit high growth in English language acquisition. In 2015-2016, a new English Language Proficiency test, known as Assessing Comprehension and Communication in English State-to-State for English Language Learners (ACCESS for ELLs) was used for the first time in Florida. In prior years, the Comprehensive English Language Learning Assessment (CELLA) was used in the State. Because these two instruments use different scales, student results are not directly comparable.

To enable inferences about rates of growth in English language acquisition, a Student Growth Percentile (SGP) methodology was used. An SGP describes a student's growth compared to other students with similar prior test scores (academic peers). More explicitly, for a particular student with a specific scale score on a test, we identify a group of his/her "academic peers" as students in the same grade and with the same scale score on that test. (It is possible to use additional demographic characteristics, such as student poverty or SPED indicators to define the group of academic peers.) Then, we examine how well this student performed on the next year's test in the same subject compared to his/her academic peers. Specifically, we find the percentile standing of that student's score in the distribution of next year's scores of his/her academic peers. That percentile is the student's SGP. For a student exhibiting an average amount of academic growth, his/her SGP would be 50.

Once SGPs are found for every student, their averages (means or medians) can be found for a group, such as a grade level within a school, or an entire school. Many states use the SGP methodology in their school and teacher accountability systems.

High
Growth
Students

Example Student's
SGP=55

Low
Growth
Students

2015 Scale Score   **2016 Scale Score**

The figure above shows an example student scale score and that of his/her academic peers on the 2015 assessment (a circle on the left). The arrows point to the 2016 scale scores for that student and his/her academic peers. The relative standing of the example student scale score in this distribution of the 2016 scale scores corresponds to an SGP of 55, which means that his/her academic growth was somewhat higher than the average growth in the group of his/her academic peers.

Calculating SGPs based on 2016 ACCESS for ELLs and 2015 CELLA Results

Both ACCESS for ELLs and CELLA are English language proficiency tests that determine student English language acquisition results in four modalities: Listening, Speaking, Reading, and Writing. However, while the ACCESS scale scores are reported separately in each modality, CELLA has a

combined Listening/Speaking scale score continuum. Consequently, that combined 2015 CELLA Listening/Speaking scale score was used as a starting point to determine SGPs for both 2016 ACCESS Listening and Speaking scale scores. In the modalities of Reading and Writing, 2015 CELLA scale scores were compared to the 2016 ACCESS scores in the same modality to find the SGPs. The calculation of SGPs was carried out separately for each 2015-2016 grade level.

After the individual SGPs were calculated, their school-level medians were found separately for each of the four modalities. Subsequently, the average of these four median SGPs was found for each school. For this investigation, only the schools with high ELL enrollment (at least 100 student results on the Reading component of the 2016 ACCESS) were considered. These schools were categorized into four types: Elementary, K-8, Middle, and Senior. In each group, approximately 20% of schools with the highest values of the average of the four language modality median SGPs were identified.

Results
Elementary Schools

School	Reading	Writing	Listening	Speaking	Average
0211 DR MANUEL C BARREIRO ELEMENTARY	0.63	0.58	0.56	0.71	0.62
1921 FLAMINGO ELEMENTARY	0.57	0.62	0.52	0.72	0.61
5381 E W F STIRRUP ELEMENTARY	0.49	0.67	0.55	0.71	0.61
1001 CORAL PARK ELEMENTARY	0.58	0.62	0.51	0.71	0.60
5481 TREASURE ISLAND ELEMENTARY	0.54	0.57	0.56	0.71	0.60
1801 FAIRLAWN ELEMENTARY	0.63	0.60	0.61	0.53	0.59
1481 JOHN G DUPUIS ELEMENTARY	0.57	0.57	0.49	0.71	0.59
4761 ROYAL PALM ELEMENTARY	0.57	0.69	0.54	0.51	0.58
0481 JAMES H BRIGHT ELEMENTARY	0.39	0.54	0.59	0.77	0.57
5431 SWEETWATER ELEMENTARY	0.62	0.45	0.47	0.71	0.56
1881 HENRY M FLAGLER ELEMENTARY	0.57	0.57	0.58	0.52	0.56
5321 SOUTHSIDE ELEMENTARY	0.57	0.63	0.58	0.47	0.56
4921 SEMINOLE ELEMENTARY	0.58	0.61	0.61	0.43	0.56

It is clear that the within-school results varied by language modality. For example, looking at the median SGPs for the school 0211, one can conclude that the growth in Speaking for an average student in this school was higher than or equal to 71% of ELL student growth results in Speaking across the District. (In this paper, the term "average student" refers to a student whose SGP is the median for the school.) On the other hand, the growth in Listening of an average student in the same school was higher than or equal to that of 56% of ELL students in the District.

School	Reading	Writing	Listening	Speaking	Average
2741 KEY BISCAYNE K-8 CENTER	0.74	0.75	0.79	0.52	0.70
0071 EUGENIA B THOMAS K-8 CENTER	0.63	0.69	0.62	0.71	0.66
1020 YOUTH CO-OP CHARTER SCHOOL	0.64	0.58	0.51	0.71	0.61
0231 AVENTURA WATERWAYS PREP CENTER	0.59	0.63	0.59	0.63	0.61
5961 WINSTON PARK K-8 CENTER	0.56	0.52	0.61	0.71	0.60
0092 NORMAN S. EDELCUP K-8 CENTER	0.56	0.61	0.66	0.55	0.60

Middle Schools

School	Reading	Writing	Listening	Speaking	Average
6751 HIALEAH GARDENS MIDDLE SCHOOL	0.61	0.85	0.59	0.66	0.68
6821 ROCKWAY MIDDLE SCHOOL	0.65	0.71	0.64	0.63	0.66
6961 WEST MIAMI MIDDLE SCHOOL	0.49	0.55	0.50	0.78	0.58
6331 KINLOCH PARK MIDDLE SCHOOL	0.54	0.55	0.54	0.61	0.56

Senior High Schools

School	Reading	Writing	Listening	Speaking	Average
7361 MIAMI KILLIAN SENIOR	0.62	0.62	0.75	0.71	0.68
7241 RONALD W REAGAN/DORAL SENIOR	0.61	0.59	0.69	0.71	0.65
7121 JOHN A FERGUSON SENIOR	0.60	0.66	0.61	0.71	0.65
7531 MIAMI SUNSET SENIOR	0.56	0.59	0.63	0.71	0.62
7781 FELIX VARELA SENIOR	0.52	0.59	0.65	0.71	0.62

Discussion

There are many factors that may influence the rates of student English language acquisition in each of the four language modalities and overall: quality of ESOL instruction, students' own efforts and interests, attitudes toward English, the proficiency in student first language, age, linguistic surroundings, parental influences, peer influences, etc. Clearly, quality of ESOL instruction, however influential, is one of many potential factors in English language acquisition.

One hopes, however, that the results of the analysis presented in this document will allow finding best practices of ESOL instruction associated with high rates of growth in acquisition of English knowledge and skills in different language modalities.