## MEMORANDUM

TO: Connie Smith, Ph.D.
Officer, Secondary Curriculum and Instruction
FROM: Allison Matney, Ed.D.
Executive Officer, Research \& Accountability

## SUBJECT: A RETROSPECTIVE STUDY EXPLORING DISTRICTWIDE K-12 WORLD LANGUAGES, THEIR IMPACT ON STUDENT ACADEMIC SUCCESS, AND EQUITY IN LANGUAGE LEARNING, 2021-2022

Attached is a copy of the World Languages program evaluation for the 2021-2022 academic year. The evaluation explored whether persistence of elementary students in school-wide foreign language programs consistently correlated with better academic outcomes compared to their non-foreign language program peers. The evaluation also assessed academic outcomes for middle and high school students who enrolled in foreign language courses.

Key findings include:

- The study found that students who participated in language programs during elementary school tended to outperform students on the state-mandated reading and math STAAR subtests at sixth grade compared to students who did not participate in language programs. This finding was more prevalent on the STAAR reading test.
- The highest average grades earned was for middle-school students enrolled in German, French, and Chinese courses, with fluctuations, from 2016-2017 to 2020-2021.
- The percentage of students who scored $80 \%$ and above on Credit by Exams increased on the Spanish 2A and the Spanish 2B paper exams from 2020 to 2021.
- There was a slight decline in the percentage of middle and high-school students who scored 3 or above on Advanced Placement Languages Other than English (LOTE) tests in spring 2019 compared to spring 2021.
- Surveyed eleventh and twelfth grade students acknowledged the need to enroll in foreign language courses to meet graduation requirements and emphasized their motivation to capitalize on the social benefits of learning another language, including obtaining a better job, traveling, and learning more about cultures and communities of the language of study.
- HISD should consider vertically aligning K-12 world languages programs districtwide in addition to providing dual language and immersion programs, given the complexity of language learning, benefits identified by students, and findings in this report.

Further distribution of this report is at your discretion. Should you have any further questions, please contact me at 713-556-6700.


AEM
Attachment
cc: Millard L. House, III Shawn Bird, Ed.D. Rahshene Davis, Ed. D. Gabi Frunza-Tanca


Educational Program Report

A RETROSPECTIVE STUDY EXPLORING DISTRIGTWIDE K-12 WORLD LANGUAGES, THEIR IMPACT ON STUDENT ACADEMIC SUCCESS, AND EQUITY IN LANGUAGE LEARNING, 2021-2022

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#  <br> ANALYZING DATA, MEASURING PERFORMANCE. 

## EVALUATION REPORT

BUREAU OF PROGRAM EVALUATION

# A Retrospective Study Exploring Districtwide K-12 World Languages, Their Impact on Student Academic Success, and Equity in Language Learning, 2021-2022 

Prepared by Venita R. Holmes, Dr.P.H.


#### Abstract

Learning another language is a complex process, that takes into consideration a variety of factors that impact how well students acquire proficiency skills in verbal and written communication, as well as cultural competence. This study hypothesized that elementary students' persistence in school-wide foreign language programs from first to fifth grades consistently correlated with better academic outcomes compared to their non-foreign language program peers. Three cohorts detected academic benefits at the middle-school level (sixth grade) based on student participation in dual, hybrid (dual and immersion in Chinese, French, and Spanish), or no language programs. While the percentage of dual language program students decreased from Cohort I (2012-2013) to Cohort III (2014-2015) (2.3\% to 1.6\%); the percentage of hybrid language students increased ( $46.2 \%$ to $48.3 \%$ ). For Cohort I, the largest positive change in the mean STAAR reading scale scores, from fifth (pretest) to sixth grades (posttest), was among dual language ( +23.741 ), followed by hybrid (+18.699), then no language program students (+7.607). Cohort I hybrid and no language students posted larger gains on STAAR math than dual language students. Similar to Cohort I, better outcomes were observed among Cohort II dual language students on the reading STAAR compared to other groups. The largest positive scale score change in math, from fifth to sixth grade, for Cohort II was among dual language (+18.214), then no language program students (+7.171), while the scores of hybrid students decreased (-1.358). There were fluctuations in the highest average grade earned for middle-school students enrolled in German, French, and Chinese courses from 2016-2017 to 2020-2021. There was a slight decline in the percentage of middle and high-school students who scored 3 or above on Advanced Placement LOTE tests in spring 2019 compared to spring 2021. The percentage of students who scored $80 \%$ and above on Credit by Exams increased on the Spanish $2 A$ and the Spanish 2B paper exams from 2020 to 2021. Surveyed secondary students emphasized their motivation to capitalize on employment opportunities, and the social benefits of learning languages and cultures. Given the complexity of language learning, and the benefits identified by students, HISD may consider vertically aligning $K-12$ world languages districtwide.


## Introduction

There has been growing interest among nations toward building proficient language learners (Marcos \& Peyton, 2000). Multilingualism encourages effective communication and judgment across communities (American Academy of Arts and Sciences Commission on Language Learning, 2016) and prepares language learners "for life in an increasingly interdependent world that is ethnically and linguistically diverse" (Thomas, Collier, \& Abbott, 1993, p. 170). A multilingual workforce strengthens economic competitiveness, "helps maintain political and security interests, and promotes tolerance and intercultural awareness" (Marcos \& Peyton, 2000, p. 4).

Kim (2020) emphasized that significant benefits are attained by educating the whole student, which

involves active engagement in the culture where the language lives. High levels of social, emotional, and ethical immersion stimulates new prospects for dialogue,
analytic orientation toward language, intellectual development, and self awareness among language learners (Maher, 2017) oreign language exposure during early education may provid he greatest opportunity for children to acquire a high level of anguage proficiency. Further, exposure in course sequences may trengthen language skills through extended practice among a community of foreign language learners (American Academy of Arts and Sciences Commission on Language Learning, 2016)

The American Council on the Teaching of Foreign Languages (ACTFL) (2013) determined that world language-learning Figure 1) Thuld be based on five standards, know as the five Cs Mgire 1). Tose stand emphasize leang a guage beyon globally-competent for their future careers and experiences.
While there is reserch that purpots the benefits of leanning
reign languages, there is minimal research that considers fersistence and motivation to learn languages among students different academic levels as they progress through school Less research is available that considers equity in language learning considering social contexts and students' background haracteristics. While Texas law and school districts provide suidance for educating and recognizing students who receive instruction in world languages, this research will build on the bod f knowledge regarding learning languages other than English.

## Background

HISD is committed to the belief that learning languages is a fundamental component of education that prepares students to take heir place as global citizens in the 21st Century. Consequently, he district's World Language Program is aligned with the Texas Languages Other Than English Program (LOTE). Language earners can reach different ranges of performance contingent pon the instructional setting, type of instruction, the impact of the learner's age and cognitive development on the speed of eaching each range of performance, and motivation by extrinsic factors such as grades and requirenens or intrinsic factors such as heritage or intended uses of the language. The curriculum is (1) communicative (2) dermined (3) slobally competent, (4) esilient and (5) curious (See Appendix A p. 14 for Profile of World Language Learner and Timeline of Language Performance Development of Students. For video of World Readiness Standards Overview by ACTFL, go to: https://youtu.be/GIDCLE-JSM4)
Any world language other than English, including America
ign Language (ASL), is considered a LOTE in Texas kindergarten through 12 education. Currently, in the state of Texas, students may arn credit by enrolling in ASL, Arabic, Chinese, French, German, Hindi, Italian, Japanese, Korean, Latin, Portuguese, Russian, panish, Turkish, Urdu, or Vietnamese (Texas Education Agency, 2019). In addition, some computer programming languages ca be used to fulfill the LOTE two-credit high-school graduation equirement. In TAC $\$ \$ 74.2$ and 74.3 , districts are required to offer and teach the TEKS for LOTE at kindergarten through grade 8 to the extent possible. At grades 9-12, districts must offer Levels II, and III or higher of the same language in at least one language Texas Education Agency, 2020).

Award of Credit: The University of Texas at Austin (UT Austin) and Texas Tech University are authorized to provide Credi by Exams (CBEs) in Texas. In January 2022, the HISD Board of Trustees authorized Avant as a CBE provider. At the time of th HISD Department of Research and Accountability
ertified to deliver course content.
Graduation Requirements: Two levels of the same language required for graduation on the Foundation High Schoo Program. A student cannot combine different levels from differen laguages to meet the LOTE requirement. Students may als meet the LOTE requirement by earning two credits in compute rogramming languages selected from Computer Science I, II, an II, AP Computer Science A, AP Computer Science Principles, IB Computer Science Standard Level, and IB Computer Scienc igher Level.

Endorsements: Beginning in 2014-2015, students could carn one or more endorsements as part of their high schoo graduation requirements. Endorsements consist of a related they provide tudents with in depth kowledge of abject Texas Education Agency Graduation Toolkit, nd). Student ust select an end ont in the ninth grade Students earn ndorsement by completing the curriculum requirements for the endorsement, including a fourth credit of math and science and wo additional elective credits (Texas Education Agency, 2020).

## Research Questions

What was the profile of cohort students who persisted in language programs during elemen
Did cohort students who persisted in dual language program during elementary school demonstrate higher gains in reading and math at middle school compared to hybrid and non-language cohort students?
What were the trends in language course performance fo middle and high school students over the past five year (2016-2017 to 2020-2021)?
Did students enrolled in Advanced Placement (AP) languag courses demonstrate academic benefits based on their AP exam performance in 2020-2021 compared to 2018-2019 (post vs. pre-COVID 19 pandemic)
What percentage of high school students met the foreign language graduation requirement through Credit by Exam (CBE)?
the perceived benefits and motivations of secondary students regarding enrollment in foreign language

## Review of the Literature

The support for language learning is grounded on extensive ears of research. Specifically, one study found a positive association between second language proficiency, cognitive kills among students who acquired a second language compare to those who did not (Bamford \& Mizokaw, 1991). Marcos and Peyton (2000) cited studies that correlated bilingual proficienc with higher scores in reading and math on standardized exams, well as verbal and nonverbal intelligence tests (Caldas \& Boudreaux, 1999; Hakuta, 1986, Thomas, Collier, \& Abbott, 993; Armstrong \& Rogers, 1997; Saunders, 1998; Rafferty 986; Andrade, 1989). A study conducted with eleventh grade students in Maryland found that, when verbal ability is controlled students who study foreign languages for longer periods of time attained higher SAT scores on some subtests relative to students who studied foreign language for a shorter period of time (Eddy HISD Department of Research and Accountability
1981). Olsen and Brown's (1992) research on the America College Test (ACT), revealed that higher English and math scor were achieved by foreign language students compared to studen who did not study a foreign language in high school (Olsen and Brown, 1992, p. 47)

Curtain and Dahlberg (2004) maintains that building foreign language proficiency is dependent on the amoun of time spent learning the language. Consequently, learnin languages during early years may provide more practice opportunities for students to build fluency skills. Moreover, study conducted in Slovenian found that preschool early language and were recentive to the learning context (Brumen, 2011) World language classes provide students access to othe cultures, developing their ability to use language appropriately in social situations, gain insights, and broaden their worldview Heining-Boynton and Haitema's research (2007) documented that foreign language students developed positive perceptions of foreign language speakers, theircultures, and future study of foreign languages. Bartley (1970) found that attitudes toward language study for non-continuing students was significantly lower than that of students who continued their study of foreign languages Speiller (1988) sought to catalogue and compare students reasons for continuing or discontinuing study of French and Spanish into their second, third, or fourth year of high schoo study. The most commonly cited reasons for continuing wer getting into college, daily use, getting a job, and travel. Th most commonly cited reasons for abandoning study were cours conflicts, difficulty of the subject, lack of progress (or proficiency) and lack of opportunity to use the language. The study also confirmed the decrease in the number of continuing students a course levels advanced
Motivation to learn languages and to benefit from the educational experience may be driven by personal, social, familiar, and cognitive characteristics that contribute to the learning process (Guerrero, 2015). Moreover, interest to lear offers students more oppotunities to interact with other languag communities and to access more learning resources (King 2014). Gueres (2015) explores Gadner and Lambert's (1972) theory of motivation to explain language learning Integrative orientation refers to the positive disposition of an individua orientation language, its culture, and its community Integrative motivated learners may have a strong desire to learn another language. Instrumental orientation refers to the practical reasons that individuals learn a language, such as meeting graduatio or college entrance requirement, or employment opportunities Gardner $(1985,2010)$ later proposed that individuals' motivatio reflects their positive attitudes toward the language community.

Rammage (1990) surveyed high school students studying French and Spanish. The research found that intrinsic factors, such as an interest in the culture or an authentic desire to learn the language, distinguished continuing students from discontinuing students. Extrinsic factors, such as fulfilling a college entranc requirement, characterized the discontinuing student. There wa a positive correlation between students' course grade and grad level when taking the second-year course, suggesting that "the earlier the students start to study a foreign language, the more likely they are to continue beyond level II" (Rammage, p. 209).

## Methods

## Study Population

There were several student groups of interest in this study Specifically, three cohorts of elementary-level students wer established based on when they enrolled in first grade and their successive progression to fifth grade in the district. The use of multiple cohorts allowed for data triangulation and validation of study findings to determine whether outcomes examined in the study were consistently observed over time. The Public ducation Information Management System (PEIMS) was used to identify students in each cohort. Cohorts, were, subsequently, ither a: (1) dual huge progn, (2) hybrid (dual language immersion program), or (3) no language program.

In addition, middle and high-school student groups were rgeted for this study based on participation in state-approved LOTE courses during the 2016-2017 through the 2020-202 cademic years, and whether they took Advanced Placement OTE exams in 2019 vs. 2021, and Credit by Exams in 2019 2020 and 2020-2021. A sample of eleventh and twelfth graders during the 2021-2022 academic year served as a student surve sample. Targeting student groups at different educational levels helped to identify trends associated with language exposure and to assess in-depth knowledge gained in languages over time.

## Data Collection and Analysis

Background characteristics of cohort students, including ace/ethnicity, gender, economic status, and whether student were classified as at risk, English learners (ELs), specia education, and gifted/talented (G/T) were extracted from PEIMS These background characteristics were captured at first grade fo ohort students.

State of Texas Assessment of Academic Readiness (STAAR) performance was analyzed at sixth grade in reading and math for Cohort I and Cohort II students who successively transitioned to middle school. Similar analysis for Cohort III was not conducte these students would have reached sixth grade. A pretest measure hese studens was used as a predictor variable. A paired t-test was conducted to detect statistically significant differences. When the exact $p$ value is less than 0.001 , it is conventional to state merely $p<0.001$. Hedges' $g$ effect size analyses assessed the strength of the relationship between variables. Hedges' $g$ is interpreted as Cohen's $d$, which is: small ( $\mathrm{d}=0.2$ ), medium ( $\mathrm{d}=0.5$ ), and large d $=0.8$ ) (Cohen, 1988). Numbers in figures are rounded.

The number and percentage of students who earned high school foreign language credit through CBEs were presented. In addition, the average course grade for middle and high schoo students in LOTE courses over the past five years were tracked. These trend analyses allows for comparisons of practices that occurred over the years to inform future practices.

Descriptive statistics were calculated on study variables, cluding means and standard deviations. Social indicator consisted of attendance and disciplinary actions (in-school and out-of-school suspensions). Academic and social outcomes were compared among language program status, the district, or at the ational level.

A modified version of the Foreign Language Learning Motivation Questionnaire (FLLMQ), consisting of 15 items, wa administered to seniors in spring 2022 using the HUB platform HISD Department of Research and Accountability

The original FLLMQ developed by Gonzales (2006) consisted of 50 survey items (Gonzales \& Lopez, 2015). The reliability entire questionnaire is $\alpha=.982$ and the range of alpha coefficien of the factors is $\alpha=.451$ to .714 . At least 3 items from eac subscale was included to explore students' motivation in th following areas: (1) desire for career and economic enhancement career-economic need, (2) desire to become global citizen/need for cultural understanding, (3) desire to communicate and affiliat with foreigners/communicative affiation need), (4) desire for self-satisfaction in learning/need for self-satisfaction, (5) self need for cultural insegration. The survey also assessed students perceptions of their foreign language skills Correlation perceptions of their foreign language skils. Corclalation between motivation and perception of foreign language skills.

## Study Limitations

There were several limitations to the study. Specifically, the study only examined data for cohorts of elementary students who were successively promoted in five years and who were enrolled in HISD during the five years. However, the use of multiple cohorts helped to validate findings and mitigate this limitation There were also limitations associated with using grade averages, considering that grades may be inflated, subjective, and Lee, 2018) Whe spirations, exp, 2018). Finally, research has shown that studens sest secondary pursits. Eparing tivesions may influench school students ma provide more in-depth understanding of the benefits of learning languages and how it relates to future academic, career, and social performance.
What was the profile of cohort students who persisted in lan guage programs during elementary school compared to thei non-language program peers?

Table 1 (p. 5) presents the total number of Cohort I, II, and III elementary school students in first through fifth grades by language program status and cohort year. It is evident that flucturer of students in each cohort and their program stat in Cobort I, $23 \%$ persisted in a dual language program ( $\mathrm{N}=234$ ) $46.2 \%$ in a hybrid language program (dual language or immersion) $(\mathrm{N}=4,706)$, and $51.5 \%$ persisted in no language program ( N $=5,237$ ). Comparatively, 11,055 students were identified in Cohort II. Among these students, $1.7 \%$ maintained their dual language program status ( $\mathrm{N}=190$ ), while $47.0 \%$ persisted in a hybrid language program ( $\mathrm{N}=5,193$ ), and $51.3 \%$ in no language program ( $\mathrm{N}=5,672$ ). Finally, 10,811 students comprised Cohor III, with $1.6 \%$ in dual language programs ( $\mathrm{N}=171$ ), $48.3 \%$ in hybrid language programs ( $\mathrm{N}=5,225$ ), and $50.1 \%$ in no language program. These findings revealed a shift in the language program status of students across cohort years as evidenced by progressiv decrease in the percentage of dual language program students in Cohort I to Cohort III ( $2.3 \%$ to $1.6 \%$ ) and the progressive increase in the percentage of hybrid language students ( $46.2 \%$ to $48.3 \%$ ), This finding may be related to the development of immersio programs across the district over the years

The demographic profile of students by cohort can be found in Table 2. There was a moderate increase in the percentage of males

Table 1: Number and Percentage of Students in Study
and Language Program Status, 2012-2013 to $2018-20$

|  | Cohort 1 |  | Cohor III |  | Cohort III |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cohort Years |  |  |  |  |  |  |
| Language Program Status | N | \% | N | \% | N | \% |
| Dual Langlage Program | 234 | 2.3 | 190 | 1.7 | 171 | 1.6 |
| Hybrid Language Program (Dual or Language Immersion*) Language Immersion*) | 4,706 | 46.2 | 5,193 | 47.0 | 5,225 | 48.3 |
| No Language Program | 5,237 | 51.5 | 5,672 | 51.3 | 5,415 | 50.1 |
| Toal | 10,177 | 100.0 | 11,055 | 100.0 | 10,811 | 100.0 |
| Notes: Students in the study were progressively promoted from grade 1 to grade 5 over cohort years ${ }^{\text {Language Immersion Programs: Arabic Immersion Magnet School (Grades PK-7); }}$ French Dual Language Immersion Program at White Elementary School (Grades PK-4); Mandarin Immersion Magnet School (includes elementary grades PK-5 and middle school grades 6-8)Elementary school consisted of grades 1-5, middle school included grades 6-8, and high school gradeswere 9-12. Source: PEIMS |  |  |  |  |  |  |

in dual language programs ( $47.4 \%$ vs. $49.1 \%$ ) and a negligibl increase in the percentage of males in no language program ( $50.2 \%$ s $50.5 \%$ ) from Cohort I to Cohort III. At the same time, ther was a negligible increase in the percentage of females in hybrid anguage programs over the cohort years ( $50.2 \%$ vs $50.3 \%$ )

The percentage of Black students in dual language program rose dramatically from $7.7 \%$ to $10.5 \%$, and rose slightly in hybrid anguage programs ( $1.3 \%$ to $1.6 \%$ ). It should also be noted that he percentage of Asian students in hybrid language programs ncreased moderately ( $2.9 \%$ to $3.4 \%$ ). There was a decline in the percentage of Hispanic students in all language groups, with the largest decline reflected among dual language program student across cohort years ( $82.1 \%$ to $7.8 \%$ ). The percentage of Whit represented in dual language programs ( $6.8 \%$ vs $8.8 \%$ ).

Table 3 (p. 6) shows that the percentage of economically isadvantaged students decreased from Cohort I to Cohort II among dual, hybrid, and no language program students. Th argest drop was among dual language program students ( $80.3 \%$ s. $61.4 \%$ ). There was also a large decline in the percentage of risk dual language program students ( $87.2 \%$ vs. $69.0 \%$ ) tose substantially ( $37.2 \%$ vs. $51.4 \%$ ). Representation of special education students decreased across cohort years for all groups, more importantly, for dual language ( $3.0 \%$ to $1.8 \%$ ) and hybrid
anguage ( $3.4 \%$ to $3.0 \%$ ) students. Simultaneously, gifted/talented students were more represented in dual language programs ove the years. The percentage of English language learners dropped or all language program groups, especially, among dual languag program students ( $70.5 \%$ vs $50.3 \%$ ).

Did students who persisted in dual language programs during elementary school demonstrate higher gains in reading an math at middle school compared to hybrid and non-languag cohort students?

The state-mandated STAAR reading and mathematics subtests were used to demonstrate the influence of language or no languag exposure on students' academic performance as they successfully progressed to sixth grade after elementary school. Students' fift grade performance was used as the pretest measure and their sixth grade performance was the posttest measure. The findings are a ollows.
Figure 2 (p. 6) and Appendix B (p. 15) reveals a statistically significant increase in the STAAR reading mean scale scores o ixth language students from fifth ( $\mathrm{M}=1599.0$; $\mathrm{SD}=141.729$ ) 000 (two-tailed test). Comparatively, the performance of hybria anguage students also increased from fifth ( $\mathrm{M}=1548.28$; SD 30.307) to sixth grades ( $\mathrm{M}=1566.98 ; \mathrm{SD}=131.734$ ), t (3332) $12.061, p=.000$ (two-tailed test). Similar findings were observe mong no language students when comparing their fifth and sixt grade scores ( $\mathrm{M}=1599.26$; $\mathrm{SD}=143.527$ vs. $\mathrm{M}=1606.87$; SD 148.926), $\mathrm{t}(3762)=4.741, \mathrm{p}=.000$ (two-tailed test)). However the largest positive scale score change in reading was observed for dual language students ( +23.741 ), followed by hybrid language $(+18.699)$, then no language program students $(+7.607)$.
Student groups also posted gains in STAAR math as they progressed from elementary to middle school. Specifically, Figur 3 (p. 6 and Appendix B, p. 16 ) depicts an increase in the mean mat cale scores of dual language students from fifth $(M=1677.33$, SD $=311, \mathrm{p}=756$ (two taited test). Comatively the perform f hybrid lage (age prom form $(\mathrm{M}=1640.18 \cdot \mathrm{SD}=144.535)$ to sixth grades $(\mathrm{M}=1650.70 \cdot \mathrm{SD}$ $=145.404), \mathrm{t}(3360)=5.824, \mathrm{p}=000$ (two-tailed test). Simila findings were observed for no language program students from fifth $(M=1658.62 ; S D=153.253)$ to sixth grades $(M=166217$; $\mathrm{SD}=148.939), \mathrm{t}(3761)=2.177, \mathrm{p}=.030$ (two-tailed test). Th

| Student Baseline Characteristics <br> Cohort Assignment | Gender |  |  |  |  |  | RaceeEnicity |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male |  |  | Female |  |  | Black |  |  | Asian |  |  | Hispanic |  |  | White |  |  | Other |  |  |
|  | 1 | II | III | I | II | III | I | II | III | 1 | " | III | 1 | II | III | 1 | " | III | 1 | " | III |
| Langage Program Status | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% |
| Dual Langagge Program ( (LLP) | 47.4 | 42.6 | 4.1 | 52.6 | 57.4 | 50.9 | 7.7 | 17.9 | 10.5 | 1.3 | 0.0 | 0.6 | 82.1 | 71.6 | 77.8 | 6.8 | 8.4 | 8.8 | 2.1 | 2.1 | 2.4 |
| Hybrid Language Program (Dual or Language Immersion) (HLP) | 49.8 | 48.9 | 49.7 | 50.2 | 51.1 | 50.3 | 1.3 | 1.8 | 1.6 | 2.9 | 3.2 | 3.4 | 94.0 | 93.1 | 92.5 | 1.3 | 1.5 | 2.1 | 3.4 | 4 | ${ }^{0.3}$ |
| No Language Program (NLP) | 50.2 | 50.3 | 50.5 | 49.8 | 49.7 | 49.5 | 33.8 | 34.9 | 32.9 | 3.7 | 3.8 | 4.6 | 47.1 | 45.5 | 46.5 | 13.5 | 13.7 | 14.0 | 1.9 | 2.1 | 2.0 |
| Notes: Cohort baseline years: Cohort I (2012-2013), Cohort II (2013-2014), Cohort III (2014-2015) <br>  *Language Immersion Programs: Arabic Immersion Magnet School (Grades PK-7); French Dual Language Immersion Program at White Elementary School (Grades PK-4); Mandarin Immersion Magnet School (includes elementary grades PK-5 and middle school grades 6-8) Elementary school consisted of grades $1-5$, middle school include <br> Elementary school consisted of grades 1-5, midde school included grades 6-8, and high school grades were 9-12. <br> Source: PEIMS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Cohort | Eco. Disadvantaged |  |  | At Risk |  |  | Special Education |  |  | Gifted/Talented |  |  | English Learners |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | II | III | 1 | II | III | 1 | II | III | 1 | II | III | 1 | II | III |
| Language Program Status | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% |
| Dual Langage Program | 80.3 | 68.9 | 61.4 | 87.2 | 81.1 | 69.0 | 3.0 | 1.6 | 1.8 | 23.5 | 30.0 | 28.1 | 70.5 | 48.9 | 50.3 |
| Hybrid Language Program (Dual or Language Immersion*) | 94.5 | 94.0 | 90.0 | 98.2 | 98.3 | 97.8 | 3.4 | 2.7 | 3.0 | 24.1 | 23.1 | 20.6 | 97.3 | 94.6 | 94.8 |
| No Language Program | 70.0 | 71.3 | 64.8 | 37.2 | 67.7 | 51.4 | 6.5 | 6.4 | 5.9 | 22.6 | 21.6 | 22.0 | 8.2 | 6.2 | 5.6 |


largest positive scale score change in mathematics was observed or hybrid language students ( +10.529 ), followed by no languag +3.557 ), then dual language program students $(+2.516)$.

The Hedges' $g$ effect size analyses in Figure 4 reveals that he dual language program had the largest impact on STAAR reading performance for Cohort I students over time ( $\mathrm{g}=0.169$ mall) compared to hybrid ( $\mathrm{g}=0.143$, negligible), and no language program students ( $\mathrm{g}=0.051$, negligible). Effect size analyses in igure 5 shows negligible impact of language and no languag programs on Cohort I students' math performance.

Figure 6 (p. 7) depicts comparisons of Cohort I language rogram students with students districtwide on SIAAR reading and math subtests when cohort students were enrolled in sixth grade (post measure). The mean STAAR reading scale score for students districtwide was 1600.0 . Thus, dual language and no anguage program students exceeded the performance of students districtwide at the post measure in sixth grade (Figure 6 vs. Figure 2). For STAAR math, Cohort I dual, hybrid, and no language program students outperformed students districtwide when coho

$$
\text { enrolled in sixth grade (Figure } 3 \text { vs. Figure 6). }
$$

Figure 7 (p. 7) and Appendix $C$ (p. 17 ) show a decrease in
 $\mathrm{M}=1622.60 \cdot \mathrm{SD}=120.991) \mathrm{t}(132)=318 \mathrm{p}=751(\mathrm{two}$ iled test). Comparatively, the performance of hybrid languag tudents in Cohort II reflected a statistically significant decreas fom fifth ( $\mathrm{M}=1561.06$; $\mathrm{SD}=136.946$ ) to sixth grades $(\mathrm{M}=$ 1555.39 ; $\mathrm{SD}=132.295$ ), $\mathrm{t}(3575)=3.874, \mathrm{p}=.000$ (two-tailed est). Similar findings were observed among no language students when comparing their fifth to sixth grade scores $(M=1606.99$

igure 2: Cohort I reading STAAR pre-(fifth grade, spring 2017) and post-(sixth grade, spring 2018) performance by language progran HISD Department of Research and Accountability

Cohorti: STAAR Math


Figure 3: Cohort I math STAAR pre-(fifth grade, spring 2017) and post (sixth grade, spring 2018) performance by language program
Cohort I: STAAR Reading


Figure 4: Cohort I Hedges'g effect size, paired STAAR reading (small $\mathrm{g}=0.2$; medium: $\mathrm{g}=0.5$, and large: $\mathrm{g}=0.8<.02=$ negligible)
1640.0


Figure 6: Districtwide STAAR, spring 2018, results as a post compariso measure for Cohort I

|  |
| :---: |
|  |  |
|  |  |
|  |  |
|  |  |



Figure 7: Cohort II reading STAAR pre-(fifth grade) and post-(sixth ade) performance by language program
$\mathrm{D}=155.089$ vs. $\mathrm{M}=1606.87 . \mathrm{SD}=148.926) \mathrm{t}(4034)=6.915$ $\mathrm{p}=.000$ (two-tailed test)). Thus, better outcomes were observed mong Cohort II dual language students on the STAAR math subtest from elementary to middle school ( -2.432 , NS), compared hybrid language ( $-5.670^{* * *}$ ) and no language program student (-10.834***).

Cohort II dual language and no language student group howed gains in math as they progressed from elementary to middle school. Specifically, Figure 8 and Appendix C (p. 17) depict an increase in the mean math scale scores of Cohort II dual language students from fifth ( $\mathrm{M}=1683.83$; $\mathrm{SD}=123.824$ ) to sixth grades $\mathrm{M}=1702.04 ; \mathrm{SD}=153.231$ ), $\mathrm{t}(140)=1.963, \mathrm{p}=.052$ (two tailed test). Comparatively, the performance of hybrid language program students decreased slightly from fifth ( $\mathrm{M}=11649.41$, $\mathrm{SD}=138.812$ ) to sixth grades ( $\mathrm{M}=1648.05 ; \mathrm{SD}=147.687$ ), $(3640)=.817, \mathrm{p}=.414$ (two-tailed test). In addition, there was a tatistically significant increase in the math scores of no language program students from fifth ( $\mathrm{M}=1655.83$; $\mathrm{SD}=147.401$ ) to sixth grades $(M=1663.00 ; S D=161.809), \mathrm{t}(4028)=4.420, p=$ 00 (two-tailed test). The largest positive scale score change in all for Cohort 11 was among dual language students ( +18.214 ) followed by no language students ( +7.171 ). At the same time, ,
The Hedges' g effect size analyses was conducted besed
Cort II students' math scores, considering that reading scores decreased for all groups from the pre- to posttest measure Figur 9 reveals that the impact on STAAR math performance for Cohort I dual language and no language program students was negligible

HISD Department of Research and Accountability sure for Cohort 2017 to 2020-2021)?


Figure 8: Cohort II math STAAR pre-(fifth grade, spring 2019) and post (sixth grade, spring 2020) performance by language program
0.140

Coho
0.130


Figure 9. Cohort II Hedges' $g$ effect sizes, paired STAAR math (small $=0.2$; medium: $\mathrm{g}=0.5$, and large: $\mathrm{g}=0.8 ;<.02=$ negligible)
ver time ( $\mathrm{g}=0.130$ and $\mathrm{g}=0.143$, respectively)
Figure 10 provides comparisons of Cohort II's performance with students districtwide on STAAR reading and math subtest when cohort students were enrolled in sixth grade (post measure) The mean STAAR reading scale score for the district was 1553.0 which was below the performance of dual, hybrid, and no languag program students (Figure 10 vs. Figure 7). The district's mean math scale score was also lower that the math score of sixth grad Cohort II students (Figure 10 vs. Figure 8)

What were the trends in language course performance fo middle and high school students over the past five years (2016-

Districtwide STAAR Results


Spring 2019 (Coho
Reading (6th Grade) Math (6th Grade)
as sure for Cohort I

Figure 5: Cohort I Hedges' $g$ effect sizes, paired STAAR math (small: $\mathrm{g}=0.2$; medium: $\mathrm{g}=0.5$, and large: $\mathrm{g}=0.8 ;<.02=$ negligible)

The trends in language course performance for middle and gh school students are presented over a five-year time span (2016-2017 to 2020-2021). The number of students enrolled in LOTE courses as well as the average course grades are also presented. Level IV LOTE courses are, typically, Advanced Placement (AP) courses. Key findings are discussed.

## Middle School LOTE Courses

Table 4 and Appendix D (p. 19) summarize the performance of middle school students in LOTE courses. In 2016-2017, middle school students enrolled in Level I - German achieved the highest average grade (93.4), followed by Level I - Chinese (88.2), and in Level I - French (90.2) Level I - Chinese (89.9), and Level I itian (89.6) attained the highest avese (8..), and Level I arian (89.6) atained the highest a Verage gade. Anong Level verage grade (88.9). The average grade for students in Level IV Spanish for Spanish Speakers was 78.9 compared to 80.9 for Level III students. In 2018-2019, students in Level III - Chinese (97.3), Level I - Italian (93.6), and Level II French (90.3) achieved the highest average grade. The average grade for students in Level IV Spanish for Spanish Speakers was 76.9 compared to 80.6 for Level II students. In 2019-2020, students in Level IV - Chinese (97.6), Level I - Italian (93.7), and Level III Chinese (93.2) attained the tighest average grade. The average grade for students in Level IV Spanish for Spanish Speakers was 77.1 compared to 83.7 for Leve II students. In 2020-2021, students in Level IV - Chinese (96.8), Level III - Chinese (94.0), and Level II French (93.6) achieved the highest average grade. The average grade for Level III - Spanish for Spanish Speakers was 77.9. Grades for Level IV - Spanish for Spanish Speakers were not in the data

## High School LOTE Courses

High school LOTE results are depicted in Appendix E (pp. $0-21$ ). The average grades by course are shown in Table 5a (p 9) and Table 5b (p. 9). In 2016-17, students enrolled in Level V - German achieved the highest average grade (98.4), followed Culture (94.8). In 2017-18, high school students in Level V-Italian (97.2), Hindi - Level III (96.2), and Other Foreign Language - IV (Hebrew) ( 95.8 ) attained the highest average grade. Did students enrolled in Advanced Placement (AP) language
courses demonstrate academic benefits based on their AP exam performance in 2020-2021 compared to 2018-2019 (post vs. pre-COVID 19 pandemic)?

The Advanced Placement (AP) program provides opportunitie for high school students to learn college-level material. Students who perform well on AP tests may be granted credit by a university and/or be exempted from taking introductory courses in college AP LOTE test results for spring 2019 (pre-COVID pandemic) and spring 2021 (post COVID 19 pandemic) are shown in Table 6 (p. 10). These years are presented because they represent the most recent results where students were administered the tests in a similar testing environment. Chinese Language and Culture along with Spanish Language and Culture were the only tests that included both middle and high-school students' results.
Overall, there was a slight decline in the percentage of students Overall, there was a slight decline in the pe
ISD Department of Research and Accountability HISD Department of Research and Accountability

 Note: Darker shades indic
who scored 3 or above on AP LOTE tests ( $75.3 \%$ vs. $66.1 \%$ (Table 6). More specifically, a higher percentage of high-schoo students compared to middle school students scored 3019 (80.4\% on the Chinese Language and Culture test in spring $2019(80.4 \%$
vs $77.8 \%)$ and in spring $2021(83.7 \%$ vs $55.8 \%)$. Moreover, there was an increase in the percentage of high-school students who attained 3 or above from 2019 to 2021 ( $80.4 \%$ to $83.7 \%$ ) In contrast, a higher percentage of middle school student compared to high school students scored 3 or above on the Spanish Language and Culture test in spring 2019 ( $83.8 \%$ vs $74.4 \%$ ) and in spring 2021 ( $73.8 \%$ vs $66.7 \%$ ). Both studen groups showed a decline in test performance over the two-yea period; however, the difference was 7.7 percentage points for high school students relative to 10 percentage points for middl chool students. Although the sample sizes were small ( 26 student in 2019 and 16 students in 2020); there was an increase in the percentage of high school students who scored 3 or above on he Italian Language and Culture test ( $88.5 \%$ vs. $93.8 \%$ ). The largest drop in performance was on the French Language and Culture test completed by high school students ( $71.4 \%$ vs. $47.7 \%$ ).

High School Students' Language Course Grades. 2016-17 to 2020-21

## High School Students - Language Courses, Part I

Discovering Languages and Cultures
Level I Russian
Level - French

| Lever 1 - German |
| :--- |
| Level - - talaian |

${ }_{\text {Level I - Latin }}^{\text {Level }- \text { Spanish }}$
Level I - Spanish
Level - Spanish For Spanish Speakers
Level - A American Sign Language
Level I Arabic
Level I C Chinse
Level I- Japanese
Level II French
Level II-Spanish
Level II-Chinese
Level II-German
Level II- Italian
Level II-Latin
Level IU- Russian
Level II-Russian
Level II-Spanish For Spanish Speakers
Level II- American Sign Language
Leveli-Arabic
Level III- Latin
Level III- Russian
Level III- Spanish
Level III- German
Lever III - Italian
Level III - Spanish For Spanish Speakers
Level III - American Sign Language

| $2016-17$ | $2017-18$ | $2018-19$ | $2019-20$ | $2020-21$ |
| :---: | :---: | :---: | :---: | :---: |

Note: Darker shades indicate higher performance, which is based on academic yea. Source: PowerSchool
What percentage of high school students met the foreign anguage graduation requirement through Credit by Exan CBE)?

HISD students who previously took a LOTE course could meet foreign language requirements with a score of $70 \%$ and above of $80 \%$ and above was required to receive foreign language credit The results for the 2020 and 2021 academic years are shown in Table 7a and Table 7b (p. 11). In 2020 and in 2021, students eithe ook a paper exam or a remote proctored exam. Comparatively, in 2021, students took a paper exam, a district proctored exam, or a remote proctored exam. Spanish and French were the only languages with CBE data for the years explored in this study. Only Spanish exam results are shown, because this exam had a sufficient
number of students to draw conclusions. Larger numbers of students took paper exams and district proctored exams; therefore, he discussion will focus on those student groups
Tables (p. 11) reveal that students passing rates 2020 and 2021 at $70 \%$ or $80 \%$ and above tended to be higher whe A 3 , and 3 B compared to remote proctored and district proctore xade. Table 7 a shows a slight decline in the passing rates of aper exams in Spine fre 2020 to 2021 wo were tested using in the percentage of students who passed at $70 \%$ and above Spanish 2B ( $84.9 \%$ vs $85.4^{\%}$ ) on paper a 10 . Compatively, 2021 there was an increase in the percentage of students who
 $82.5 \%) 2 \mathrm{~A}(77.3 \%$ vs. $78.0 \%$ ) ad $2 \mathrm{~B}(75.3 \%$ vs. $82.9 \%$ ) from 2020 to 2021. Relative to district proctored exams, at least $50 \%$

Table 5b: Average High School Students Language Course Grades,
2016-17 to 2020-21 2016-17 to 2020-2

| Academic Year | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| High School Students - Language Courses, Part II | $\begin{aligned} & \text { Average } \\ & \text { Grade } \end{aligned}$ | Average <br> Grade | $\begin{array}{\|c\|c\|c\|c\|cr:\|c\|} \hline \text { Grade } \end{array}$ | Average <br> Grade | $\begin{aligned} & \text { Average } \\ & \text { Grade } \end{aligned}$ |
| Level III-Japanese | 87.4 | 83.7 | 8.3 | 86.7 | 78.1 |
| Level II-Japanese | 81.5 | 87.3 | 75.7 | 80.5 | 76.0 |
| Level IV - Itaian | 88.0 | ${ }_{88,7}$ | 79.8 |  | 57.5 |
| Level IV - Latin | 83.8 |  |  | 81.5 | 81.9 |
| Level IV-Spanish | ${ }^{873}$ | 88, 9 | 87. | 85.0 |  |
| Level IV- American Sign Language |  | 86.9 | 86.8 |  | 857 |
| Level IV - French | 83.9 | 91.4 | 93.7 | 78.7 | 77.6 |
| Level IV-German | 9.5 | 78.3 | ${ }^{7} .8$ | 82.2 | 83.4 |
| Level IV- Russian | 92.4 | 86.0 | 83.5 |  |  |
| Level IV - Arabic | 80.5 | ${ }^{82.3}$ | 87. | 89. | 873 |
| Level IV- Chinese | 80.1 | 86.0 | 84.9 | 85.2 | 83.8 |
| Level IV-Japanese | 85.5 | 79.8 | 79.1 | 7.5 | 72.8 |
| Level IV - Spanish For Spanish Speakers |  |  | 79.2 | 88.3 | ${ }^{77.8}$ |
| Level V- French | ${ }^{2} 3$ | 91.5 | ${ }^{89.8}$ | 85.0 | ${ }_{8}^{8.6}$ |
| Level V - Italian | 98.4 | 97.2 | ${ }^{6}$. 5 | 99.0 | 99.7 |
| Level V - Spanish | 63.9 | 86.4 | 83.5 | 80.2 | 80.9 |
| Level V German |  |  | 87.7 | 93.5 | 87.0 |
| Level V - Arabic |  |  | 95.6 | 97.0 |  |
| Level VI - Itaian |  |  |  | 98.0 |  |
| Level VI- Russian | 96.8 | 95.5 | 91.8 | 98.8 | ${ }^{7} .9$ |
| Level II-Spanish | 89.9 | 89,4 |  | 93.5 | ${ }_{88,7}$ |
| Hindi Level I | 91. | 95.7 | 94.1 | 95.5 | 950 |
| Hindi Level II | 92.7 | 9.7 | 96.2 | 95.4 | 91.4 |
| Hindi Level III | 96.2 | 96.2 | 94.7 | 959 | 93.0 |
| Vietmanese Level III |  | 90.3 |  |  |  |
| Other Foreign Langages Level I |  | 77.6 | ${ }^{83.4}$ | ${ }^{82.8}$ | 7.0 |
| Other Foriegn Languages Level III |  | ${ }_{88,6}$ | 85.8 | 87.4 | 92.0 |
| Other Forign Languages Level III |  | 92.8 | ${ }^{1,3}$ | 89.8 | 88.4 |
| Other Forign Languages Level IV |  | 95.8 | 92.5 | 89.1 | 83.9 |
| Other Foreien Languages Level V |  |  |  |  | 88.5 |
| Special Topicis in Langage and Culure | 94.8 |  | 96.0 | ${ }_{7} 9$ |  |
| Seminar in Languages Other Than English, Advanced (First Time Taken) - Spanish |  |  |  | 87.1 | 81.3 |

Note: Darker shades in
Source: PowerSchool

|  |  | Spring 2019 |  |  | Spring 2021 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { Houston } \\ & \text { ISD } \end{aligned}$ | Middle Schools | $\begin{gathered} \text { High } \\ \text { Schools } \end{gathered}$ | $\begin{aligned} & \text { Houston } \\ & \text { ISD } \end{aligned}$ | Middle Schools | $\begin{aligned} & \text { High } \\ & \text { Schools } \end{aligned}$ |
| Chinese Language and Culture | \# Exams>=3 | 59 | 14 | 45 | 70 | 29 | 41 |
|  | \# of Exams | 74 | 18 | 56 | 101 | 52 | 49 |
|  | \% Exams>=3 | 79.7 | 77.8 | 80.4 | 69.3 | 55.8 | 83.7 |
| French Language and Culture | \# Exams>=3 | 50 | - | 50 | 21 | - | 21 |
|  | \# of Exams | 70 | - | 70 | 44 | - | 44 |
|  | \% Exams>=3 | 71.4 | - | 71.4 | 47.7 | - | 47.7 |
| German Language and Culture | \# Exams>=3 | 19 | - | 19 | 12 | - | 12 |
|  | \# of Exams | 23 | - | 23 | 17 | - | 17 |
|  | \% Exams>=3 | 82.6 | - | 82.6 | 70.6 | - | 70.6 |
| Italian Language and Culture | \# Exams>=3 | 23 | - | 23 | 15 | - | 15 |
|  | \# of Exams | 26 | - | 26 | 16 | - | 16 |
|  | \% Exams>=3 | 88.5 | - | 88.5 | 93.8* | - | 93.8 |
| Japanese Language and Culture | \# Exams>=3 | 10 | - | 10 | 8 | - | 8 |
|  | \# of Exams | 10 | - | 10 | 10 | - | 10 |
|  | \% Exams>=3 | 100.0 | - | 100.0 | 80.0 | - | 80.0 |
| Latin | \# Exams>=3 | 10 | - | 10 | 3 | - | 3 |
|  | \# of Exams | 15 | - | 15 | 6 | - | 6 |
|  | \% Exams>=3 | 66.7 | - | 66.7 | 50.0 | - | 50.0 |
| Spanish Language and Culture | \# Exams>=3 | 2,170 | 508 | 1,662 | 1,287 | 284 | 1,003 |
|  | \# of Exams | 2,839 | 606 | 2,233 | 1,888 | 385 | 1,503 |
|  | \% Exams>=3 | 76.4 | 83.8 | 74.4 | 68.2 | 73.8 | 66.7 |
| Spanish Literature and Culture | \# Exams>=3 | 251 | - | 251 | 122 | - | 122 |
|  | \# of Exams | 387 | - | 387 | 246 | - | 246 |
|  | \% Exams>=3 | 64.9 | - | 64.9 | 49.6 | - | 49.6 |
|  |  |  |  |  |  |  |  |
| Total AP Exams | Total \# > $=3$ | 2,592 | 522 | 2,070 | 1,538 | 313 | 1,225 |
|  | Total \# Exams | 3,444 | 624 | 2,820 | 2,328 | 437 | 1,891 |
|  | Total \% >=3 | 75.3 | 83.7 | 73.4 | 66.1 | 71.6 | 64.8 |

of students passed all exams in 2020 at $70 \%$ or above, with the with others using the foreign language that they completed to meet highest percentage passing Spanish 3A and 3B ( $73.1 \%$ and $75.0 \%$, graduation requirements. The results are shown in Figure 10a (p. respectively). In addition, at least $50 \%$ of students passed exams at 12). The largest percentage of students rated their listening skills $80 \%$ or above, except Spanish 3A (42.3\%).
What were the perceived benefits and motivations of secondary students regarding enrollment in foreign language courses "excellent" ( $38.5 \%$ ). Comparatively, $31.8 \%$ rated their reading skills as "excellent", followed by their speaking skills (29.7\%), then their writing skills $(24.5 \%)$. Further, the highest percentage of students rated their writing skills as "very poor" ( $10.0 \%$ ).
An overwhelming majority of survey respondents "strongly
A survey was conducted with eleventh and twelfth grade HISD agreed" that learning a foreign language was fun ( $81.3 \%$, secondary students to gather their perceptions concerning benefits rewarding ( $80.8 \%$ ), and easy ( $69.9 \%$ ). (See Figure 10b, p. 12, fo and motivations for enrolling in foreign language courses. A total results.)
umber and percelage of studen who took foreign language courses to meet graduation requirements. The largest percentages enrolling in foreign language courses. The findings can be found in of survey respondents took Spanish (76.1\%), followed by French $\begin{array}{ll}\text { Figure 10c (p. 12). The highest percentages of students indicated } \\ \text { that foreign languge will ber }\end{array}$ $(11.5 \%)$. Students were asked to rate their skill level to communicate $70.0 \%$ of students agreed that they enrolled in foreign langua HISD Department of Research and Accountability $70.0 \%$ of students agreed that they enrolled in foreign language

Table 7 a. Credit by Exam Results, Passing Rate $>=70$ (if students had
prior instruction)
prior instrucion)

| Exam/Format | Scored Test | $\begin{aligned} & \text { Passed } \\ & (>=70) \end{aligned}$ | $\begin{gathered} \% \\ \text { Passed } \end{gathered}$ | Mean |
| :---: | :---: | :---: | :---: | :---: |
| 2020 |  |  |  |  |
| Paper Exam |  |  |  |  |
| SPN 1A | 91 | 75 | 82.4 | 84.8 |
| SPN 1B | 85 | 71 | 83.5 | 85.5 |
| SPN 2A | 141 | 123 | 87.2 | 84.3 |
| SPN 2B | 166 | 141 | 84.9 | 83.8 |
| SPN 3A | 15 | 13 | 86.7 | 81.6 |
| SPN 3B | 15 | 11 | 73.3 | 78.1 |
| Remote Proctored |  |  |  |  |
| SPN 1A | 8 | 2 | 25.0 | 40.5 |
| SPN 1B | 10 | 4 | 40.0 | 63.4 |
| SPN 2A | 10 | 3 | 30.0 | 55.4 |
| SPN 2B | 8 | 3 | 37.5 | 67.0 |
| SPN 3A | 5 | 1 | 20.0 | 62.0 |
| SPN 3B | 5 | 1 | 20.0 | 63.6 |
| 2021 |  |  |  |  |
| Paper Exam |  |  |  |  |
| SPN 1A | 26 | 21 | 80.8 | 82.3 |
| SPN 1B | 29 | 24 | 82.8 | 83.1 |
| SPN 2A | 41 | 34 | 82.9 | 82.4 |
| SPN 2B | 41 | 35 | 85.4 | 83.4 |
| District Proctored |  |  |  |  |
| SPN 1A | 100 | 56 | 56.0 | 73.5 |
| SPN 1B | 101 | 68 | 67.3 | 79.6 |
| SPN 2A | 112 | 73 | 65.2 | 76.8 |
| SPN 2B | 110 | 76 | 69.1 | 76.4 |
| SPN 3A | 26 | 19 | 73.1 | 72.8 |
| SPN 3B | 24 | 18 | 75.0 | 76.8 |
| Remote Proctored |  |  |  |  |
| SPN 1A | 32 | 20 | 62.5 | 70.2 |
| SPN 1B | 27 | 16 | 59.3 | 66.0 |
| SPN 2A | 2 | 0 | 0.0 | 36.0 |
| SPN 2B | 3 | 1 | 33.3 | 46.7 |
| SPN 3A | 2 | 1 | 50.0 | 71.0 |
| SPN 3B | 1 | 0 | 0.0 | 65.0 |

courses because it gives them employment opportunities over ther applicants ( $79.4 \%$ ) to better understand other cultures in th United States and abroad ( $79.0 \%$ ), a desire to communicate and Uffiliate with foreigners ( $79.3 \%$ ), for self-confidence to understand other cultures $(75.9 \%)$, to communicate with people from othe ountries through social media ( $75.7 \%$ ), to gain respect for people from other countries who are different from them ( $75.0 \%$ ), to mprove their chances of getting a good job ( $74.5 \%$ ), and foreign language helps them relate to people from other countries (73.6).

## Discussion

This study hypothesized that elementary students' persistenc

Table 7b. Credit by Exam Results, Passing Rate $>=\varepsilon$

Exam/Format | $\begin{array}{c}\text { corred } \\ \text { Test }\end{array}$ | $\begin{array}{c}\text { Passed } \\ (>=80)\end{array}$ | $\begin{array}{c}\% \\ \text { Passed }\end{array}$ | Mean |
| :---: | :---: | :---: | :---: | :---: |

| 2020 |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Paper Exam |  |  |  |  |  |  |
| SPN 1A | 91 | 73 | 80.2 | 84.8 |  |  |
| SPN 1B | 85 | 68 | 80.0 | 85.5 |  |  |
| SPN 2A | 141 | 109 | 77.3 | 84.3 |  |  |
| SPN 2B | 166 | 125 | 75.3 | 83.8 |  |  |
| SPN 3A | 15 | 11 | 73.3 | 81.6 |  |  |
| SPN 3B | 15 | 10 | 66.7 | 78.1 |  |  |
| Remote Proctored |  |  |  |  |  |  |
| SPN 1A | 8 | 2 | 25.0 | 40.5 |  |  |
| SPN 1B | 10 | 3 | 30.0 | 63.4 |  |  |
| SPN 2A | 10 | 3 | 30.0 | 55.4 |  |  |
| SPN 2B | 8 | 3 | 37.5 | 67.0 |  |  |
| SPN 3A | 5 | 0 | 0.0 | 62.0 |  |  |
| SPN 3B | 5 | 0 | 0.0 | 63.6 |  |  |
| 2021 |  |  |  |  |  |  |
| Paper Exam |  |  |  |  |  |  |
| SPN 1A |  |  |  |  |  |  |
| SPN 1B | 26 | 20 | 76.9 | 82.3 |  |  |
| SPN 2A | 29 | 24 | 82.8 | 83.1 |  |  |
| SPN 2B | 41 | 32 | 78.0 | 82.4 |  |  |

District Proctored

| SPN 1A | 100 | 52 | 52.0 | 73.5 |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| SPN 1B | 101 | 65 | 64.4 | 79.6 |  |
| SPN 2A | 112 | 65 | 58.0 | 76.8 |  |
| SPN 2B | 110 | 69 | 62.7 | 76.4 |  |
| SPN 3A | 26 | 11 | 42.3 | 72.8 |  |
| SPN 3B | 24 | 15 | 62.5 | 76.8 |  |
|  |  |  |  |  |  |
| Remote Proctored | 32 | 19 | 59.4 | 70.2 |  |
| SPN 1A | 27 | 11 | 40.7 | 66.0 |  |
| SPN 1B | 2 | 0 | 0.0 | 36.0 |  |
| SPN 2A | 3 | 0 | 0.0 | 46.7 |  |
| SPN 2B | 2 | 1 | 50.0 | 71.0 |  |
| SPN 3A | 1 | 0 | 0.0 | 65.0 |  |
| SPN 3B |  |  |  |  |  |

in school-wide foreign language programs from first to fift grades consistently correlated with better academic outcom compared to their non-foreign language program peers. Thre ohors of elementary school students provided a means to dete ade benefits at the middle school level (sixth grade) base on participation in dual, hybrid, or no language programs. Furthe tudendy analyzed the performance of middle and high schoo Exams. Fin LOTE courses, on LOTE AP exams, and on Credit by to explonally, eleventh and twelfth-grade students were surveyed foreign linge academic
Conguage courses. who participated in the research, the study found that studen HISD Department of Research and Accountability


Figure 10c: Secondary students' survey results on why they enrolled in foreign language courses
course grades, AP exam, and CBE performance for secondary students were explored. These trend analyses allowed fo comparisons of practices that occurred over the years to inform future practices. This study found inconsistencies in this pattern, course. Further the success rate for students earning CBE could ounc. F wrsesed for Spanish courses due to the small cample sizes and students not taking tests in other languages. CBE performance ended to be more correlated with the language being tested and with the test format (i.e paper vs, proctored). More investigation is needed to understand these finding to ensure that students ar successful as they advance to higher levels of language learning.

Motivation to learn languages and to benefit from the educational experience may be driven by personal, social, familiar, and cognitive characteristics that contribute to the learning process, To explore this phenomenon, eleventh and twelfth-grade students perceptions were captured through survey research. The findings were consistent with the research. While students acknowledged the need to meet graduation requirements, they also emphasized their motivation to capitalize on the social benefits of learning a learning, including to travel, learn more about cultures, and the community of the language of study.
Given the complexity of language learning, and the benefits identified by students, HISD may consider vertically aligning

K-12 world languages districtwide. This will ensure that equity Motivation Questionnaire: Further Examination of a Six-Factor in language enroliment across subgroups of the student population Model.
and improvements in academic performance will be realized as Guerrero, M. (2015). Motivation in second language learning students progress from elementary to middle and high school.

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Timeline of Language Performance Development of Students
Novice Range Intermedita Rantel Advanced Ranse


| Cohort I Pre- Post STAAR Reading Performance (Fifith to Sixth Grade, Spring 2017 vs. Spring <br> 2018) |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  | Mean | N | Std. <br> Deviation | Std. Error <br> Mean |
| Dual Language Program | Pre Reading Scale Score | 1599.00 | 189 | 141.730 | 10.309 |
|  | Post Reading Scale Score | 1622.74 | 189 | 137.923 | 10.032 |
| Hybrid Language Program | Pre Reading Scale Score | 1548.28 | 3333 | 130.307 | 2.257 |
|  | Post Reading Scale Score | 1566.98 | 3333 | 131.734 | 2.282 |
| No Language Program | Pre Reading Scale Score | 1599.26 | 3763 | 143.527 | 2.340 |
|  | Post Reading Scale Score | 1606.87 | 3763 | 148.926 | 2.428 |


| Cohort I Reading Correlations, (Fifith to Sixth Grade, Spring 2017 vs.    <br> Spring 2018)    | N | Correlations | Sig. |
| :--- | :---: | :---: | :---: |
|  | 189 | .778 | .000 |
| Dual Language Program | 3333 | .767 | .000 |
| Hybrid Language Program | 3763 | .774 | .000 |
| No Language Program |  |  |  |


| Cohort I Reading Correlations, (Pifith to Sixth Grade, Spring 2017 vs. Spring 2018) |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | Std. <br> Devia. | Std. Error <br> Mean | Lower <br> C.I. | Upper <br> C.I. | t | df | Sig. |
| Dual Language Program | 23.741 | 93.151 | 6.776 | -37.107 | -10.375 | 3.504 | 188 | $.001 * *$ |
| Hybrid Language Program | 18.699 | 89.504 | 1.550 | -21.739 | -15.659 | 12.061 | 3332 | $.000^{* *}$ |
| No Language Program | 7.607 | 98.416 | 1.604 | -10.752 | -4.461 | 4.741 | 3762 | $.000^{* * *}$ |


| Cohort I Pre- Post STAAR Math Performance, (Fifth to Sixth Grade, Spring 2017 <br> 2018) vs. Spring      <br>   Mean N Std. <br> Deviation Std. Error <br> Mean <br>       <br> Dual Language Program Pre Math Scale Score 1677.33 192 133.907 9.664 <br>  Post Math Scale Score 1679.84 192 142.014 10.249 <br> Hybrid Language Program Pre Math Scale Score 1640.18 3361 144.535 2.493 <br>  Post Math Scale Score 1650.70 3361 145.404 2.508 <br> No Language Program Pre Math Scale Score 1658.62 3762 153.253 2.499 <br>  Post Math Scale Score 1662.17 3762 148.939 2.428 |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |


| Cohort I Math Correlations, (Firith to Sixth Grade, Spring 2017 vs. <br> Spring 2018)   <br>  N Correlations <br> Sig.   <br> Dual Language Program 192 .671 <br> Hybrid Language Program 3361 .739 <br> No Language Program 3762 .000 | .780 | .000 |
| :--- | :---: | :---: | :---: |


| Cohort I Math Correlations, (Fith to Sixth Grade, Spring 2017 vs. Spring 2018) |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | Std. <br> Devia. | Std. Error <br> Mean | Lower <br> C.I. | Upper <br> C.I. | t | df | Sig. |
| Dual Language Program | 2.516 | 112.074 | 8.088 | -18.469 | 13.438 | .311 | 191 | .756 |
| Hybrid Language Program | 10.529 | 104.799 | 1.808 | -14.073 | -6.984 | 5.824 | 3360 | $.000^{* * *}$ |
| No Language Program | 3.557 | 100.201 | 1.634 | -6.760 | -.354 | 2.177 | 3761 | $.030^{*}$ |

Significance: *<.05; **<.01; *** < . 00

| Cohort II Pre- Post STAAR Reading Performance, (Fifith to Sixth Grade, Spring 2018 vs. Spring 2019) |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  |  | Mean | N | Std. <br> Deviation | Std. Error <br> Mean |
| Dual Language Program | Pre Reading Scale Score | 1625.03 | 132 | 132.990 | 11.575 |
|  | Post Reading Scale Score | 1622.60 | 132 | 129.991 | 11.314 |
| Hybrid Language Program | Pre Reading Scale Score | 1561.06 | 3575 | 136.946 | 2.290 |
|  | Post Reading Scale Score | 1555.39 | 3575 | 132.295 | 2.213 |
| No Language Program | Pre Reading Scale Score | 1606.99 | 4034 | 155.089 | 2.442 |
|  | Post Reading Scale Score | 1596.16 | 4034 | 151.211 | 2.381 |


| Cohort II Reading Correlations (Fifih to Sixth Grade, Spring <br> vs. Spring 2019)   <br>  N Correlations <br> Sig.   <br> Dual Language Program 132 .777 <br> Hybrid Language Program 3575 .789 <br> No Language Program 4034 .789 | .000 |
| :--- | :---: | :---: | :---: |


| Cohort II Reading Correlations, (Firith to Sixth Grade, Spring 2018 vs. Spring 2019) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | Std. | Std. Error Mean | $\begin{aligned} & \text { Lower } \\ & \text { C.I. } \end{aligned}$ | $\begin{aligned} & \text { Upper } \\ & \text { C.I. } \end{aligned}$ | t | df | Sig. |
| Dual Language Program | -2.432 | 87.955 | 7.656 | -12.713 | 17.576 | -.318 | 131 | 751 |
| Hybrid Language Program | -5.670 | 87.517 | 1.464 | 2.801 | 8.540 | -3.874 | 3574 | .000*** |
| No Language Program | -10.834 | 99.506 | 1.567 | 7.762 | 13.905 | -6.915 | 4033 | . 000 *** |

$\qquad$

$|$| Cohort II Pre- Post STAAR Math Performance, (Fifth to Sixth Grade, Spring 2019 <br> 2020) vs. Spring |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  | Mean | N | Std. <br> Deviation | Std. Error <br> Mean |
| Dual Language Program | Pre Math Scale Score | 1683.83 | 140 | 123.824 | 10.465 |
|  | Post Math Scale Score | 1702.04 | 140 | 153.231 | 12.950 |
| Hybrid Language Program | Pre Math Scale Score | 1649.41 | 3640 | 138.812 | 2.301 |
|  | Post Math Scale Score | 1648.05 | 3640 | 147.687 | 2.448 |
| No Language Program | Pre Math Scale Score | 1655.83 | 4028 | 147.401 | 2.323 |
|  | Post Math Scale Score | 1663.00 | 4028 | 161.809 | 2.550 |


| Cohort II Math Correlations, (Fifith to Sixth Grade, Spring 2019 vs. <br> Spring 2020) |  |  |  |
| :--- | :---: | :---: | :---: |
|  | N | Correlations | Sig. |
| Dual Language Program | 140 | .705 | .000 |
| Hybrid Language Program | 3640 | .757 | .000 |
| No Language Program | 4028 | .782 | .000 |


| Cohort II Math Correlations, (Firth to Sixth Grade, Spring 2019 vs. Spring 2020) |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | Std. <br> Devia. | Std. Error <br> Mean | Lower <br> C.I. | Upper <br> C.I. | t | df | Sig. |
| Dual Language Program | 18.214 | 109.809 | 9.281 | -36.564 | .135 | 1.963 | 139 | .052 |
| Hybrid Language Program | -1.358 | 100.287 | 1.662 | -1.901 | 4.617 | -.817 | 3639 | .414 |
| No Language Program | 7.171 | 102.977 | 1.623 | -10.352 | -3.990 | 4.420 | 4027 | $.000^{* * *}$ |


| Academic Year | 2016-2017 |  | 2017-2018 |  | 2018-2019 |  | 2019-2020* |  | 2020-2021 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n | $\begin{gathered} \text { Average } \\ \text { Grade } \end{gathered}$ | n | Average | n | $\begin{aligned} & \text { Average } \\ & \text { Grade } \end{aligned}$ | n | Average | n | Average |
| Middle School | 8,922 | 84.3 | 8,705 | 84.8 | 8,427 | 84.4 | 7,978 | 86.2 | 8,340 | 76.7 |
| Languages Other Than English Level I - French | 710 | 88.6 | 737 | 90.2 | 709 | 88.9 | 681 | 90.9 | 624 | 88.0 |
| Languages Other Than English Level I - German | 158 | 93.4 | 89 | 88.9 | 62 | 85.3 | 48 | 86.2 | 43 | 75.8 |
| Languages Other Than English Level I- Italian | 42 | 85.7 | 22 | 89.6 | 20 | 93.6 | 18 | 93.7 | 52 | 89.6 |
| Languages Other Than English Level I - Latin | 304 | 86.2 | 373 | 82.5 | 332 | 88.3 | 304 | 90.9 | 166 | 91.8 |
| Languages Other Than English Level I - Spanish | 3,679 | 83.2 | 3,667 | 83.9 | 3,600 | 83.6 | 3,233 | 86.4 | 4,329 | 76.6 |
| Languages Other Than English Level I - Spanish For Spanish Speakers | 2,158 | 83.5 | 1,546 | 83.9 | 1,552 | 82.7 | 1,532 | 82.9 | 1,031 | 66.9 |
| Languages Other Than English Level I- Chinese | 329 | 88.2 | 311 | 89.9 | 236 | 88.0 | 295 | 90.2 | 278 | 89.1 |
| Languages Other Than English Level II - French | 203 | 80.0 | 129 | 87.6 | 123 | 90.3 | 98 | 91.4 | 74 | 93.6 |
| Languages Other Than English Level II - Spanish | 677 | 86.3 | 731 | 87.6 | 602 | 88.6 | 575 | 87.1 | 564 | 78.4 |
| Languages Other Than English Level II - Chinese | 29 | 87.8 | 45 | 88.9 | 32 | 90.2 | 41 | 88.7 | 84 | 89.9 |
| Languages Other Than English Level II - Spanish For Spanish Speakers | 496 | 82.5 | 489 | 84.0 | 449 | 79.7 | 499 | 84.2 | 704 | 68.1 |
|  |  |  |  |  |  |  | 104 | 86.1 | 219 | 68.5 |
|  |  |  |  |  | 22 | 97.2 | 34 | 93.2 | 38 | 94.0 |
|  |  |  | 401 | 80.8 | 525 | 80.6 | 408 | 83.7 | 112 | 77.9 |
|  |  |  | 71 | 78.9 | 79 | 76.9 | 98 | 77.1 |  |  |
|  |  |  |  |  |  |  | 10 | 97.6 | 22 | 96.8 |
| Languages Other Than English Level II - Latin | 137 | 80.5 | 94 | 80.1 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

$\qquad$

| Academic Year | 2016-2017 |  | 2017-2018 |  | 2018-2019 |  | 2019-2020* |  | 2020-2021 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n | Average Grade | n | Average Grade | n | Average Grade | n | Average Grade | n | Average Grade |
| Discovering Languages and Cultures |  |  | 27 | 95.5 | 23 | 95.0 | 20 | 97.5 | 42 | 66.2 |
| Languages Other Than English Level I - Russian | 237 | 77.9 | 143 | 78.8 | 182 | 80.6 | 186 | 82.2 | 22 | 94.2 |
| Languages Other Than English Level I- French | 2,697 | 79.0 | 2,859 | 80.2 | 2,284 | 83.2 | 2,296 | 84.3 | 2,222 | 77.1 |
| Languages Other Than English Level I - German | 372 | 73.2 | 412 | 76.0 | 288 | 80.3 | 304 | 80.7 | 311 | 82.2 |
| Languages Other Than English Level I- Italian | 173 | 80.7 | 220 | 79. | 183 | 85.3 | 184 | 82. | 101 | 77.6 |
| Languages Other Than English Level I- Latin | 189 | 83.1 | 119 | 84.9 | 189 | 85.1 | 158 | 85.2 | 145 | 78.3 |
| Languages Other Than English Level I - Spanish | 11,311 | 76.0 | 11,301 | 77.9 | 11,496 | 79.6 | 12,541 | 80.8 | 13,853 | 73.1 |
| Languages Other Than English Level I - Spanish For Spanish Speakers | 2,057 | 80.4 | 1,743 | 80.9 | 1,528 | 80.4 | 1,703 | 81.1 | 1,516 | 68.8 |
| Languages Other Than English Level I- American Sign Language | 1,384 | 79.8 | 1,577 | 82.1 | 1,272 | 85.6 | 1,077 | 86.7 | 856 | 84.6 |
| Languages Other Than English Level I-Arabic | 155 | 78.4 | 121 | 81.8 | 162 | 83.0 | 79 | 84.3 | 62 | 73.5 |
| Languages Other Than English Level I- Chinese | 893 | 81.1 | 898 | 80.5 | 757 | 83.2 | 489 | 81.2 | 660 | 82.8 |
| Languages Other Than English Level I- Japanese | 142 | 79.6 | 90 | 81.0 | 102 | 72.8 | 88 | 81.1 | 106 | 73.0 |
| Languages Other Than English Level II - French | 2,480 | 81.4 | 2,345 | 80.8 | 2,328 | 82.3 | 2,120 | 83.7 | 2,281 | 81.5 |
| Languages Other Than English Level II - Spanish | 12,020 | 78.3 | 12,674 | 80.7 | 12,813 | 81.2 | 12,863 | 83.5 | 14,023 | 77.4 |
| Languages Other Than English Level II - Chinese | 609 | 83.1 | 678 | 84.6 | 630 | 81.3 | 533 | 85.7 | 328 | 83.9 |
| Languages Other Than English Level II - German | 263 | 77.8 | 251 | 79.5 | 291 | 80.6 | 230 | 82.4 | 261 | 80.6 |
| Languages Other Than English Level II - Italian | 139 | 82.2 | 106 | 81.8 | 86 | 83.1 | 110 | 87.4 | 121 | 79.5 |
| Languages Other Than English Level II - Latin | 115 | 83.5 | 131 | 84.4 | 128 | 85.7 | 146 | 90.0 | 108 | 79.9 |
| Languages Other Than English Level II - Russian | 84 | 82.3 | 113 | 80.9 | 107 | 78.1 | 127 | 81.3 | 45 | 83.0 |
| Languages Other Than English Level II - Spanish For Spanish Speakers | 2,036 | 78.8 | 1,688 | 80.5 | 1,569 | 78.8 | 1,557 | 83.7 | 1,592 | 69.1 |
| Languages Other Than English Level II- American Sign Language | 412 | 76.4 | 582 | 76.8 | 954 | 81.8 | 652 | 82.9 | 638 | 80.8 |
| Languages Other Than English Level II-Arabic | 48 | 85.6 | 99 | 82.0 | 79 | 83.7 | 116 | 83.2 | 69 | 75.6 |
| Languages Other Than English Level III - French | 749 | 83.8 | 915 | 85.7 | 660 | 87.5 | 471 | 90.1 | 428 | 85.6 |
| Languages Other Than English Level III - Latin | 48 | 85.5 | 73 | 88.5 | 27 | 90.7 | 32 | 87. | 31 | 85.6 |
| Languages Other Than English Level III - Russian | 84 | 84.4 | 40 | 83.3 | 52 | 85.7 | 35 | 92.9 | 10 | 89.9 |
| Languages Other Than English Level III - Spanish | 4,568 | 84.7 | 3,889 | 84.9 | 3,597 | 83.5 | 3,411 | 83.8 | 3,186 | 81.3 |
| Languages Other Than English Level III - Chinese | 377 | 86.6 | 276 | 86.3 | 304 | 88.1 | 225 | 90.0 | 221 | 88.1 |
| Languages Other Than English Level III - German | 84 | 86.0 | 81 | 84.8 | 83 | 84.1 | 76 | 84.4 | 70 | 80.3 |
| Languages Other Than English Level III - Italian | 96 | 84.7 | 70 | 85.4 | 63 | 86.7 | 45 | 84.8 | 75 | 82.7 |
| Languages Other Than English Level III - Spanish For Spanish Speakers | 284 | 78.9 | 321 | 83.0 | 435 | 79.1 | 482 | 83.1 | 498 | 76.8 |
| Languages Other Than English Level III- American Sign Language | 71 | 88.6 | 43 | 81.3 | 39 | 91.9 |  |  |  |  |
| Languages Other Than English Level III -Arabic | 17 | 81.0 | 26 | 91.3 | 46 | 93.2 | 28 | 83.8 | 48 | 88.9 |
| Languages Other Than English Level III-Japanese | 33 | 87.4 | 41 | 83.7 | 38 | 86.3 | 23 | 86.7 | 31 | 78.1 |
| Lan, | 93 | 81.5 | 82 | 87.3 | 52 | 75.7 | 52 | 80.5 | 56 | 76.0 |


| $\begin{array}{\|l\|} \hline \text { High School S } \\ \hline \text { Academic Year } \end{array}$ | 2016-2017 |  | 2017-2018 |  | 2018-2019 |  | 2019-2020* |  | 2020-2021 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n | $\begin{array}{\|c\|} \hline \text { Average } \\ \text { Grade } \end{array}$ | n | $\begin{array}{\|c\|} \hline \text { Average } \\ \text { Grade } \end{array}$ | n | $\begin{array}{\|c} \hline \text { Average } \\ \text { Grade } \end{array}$ | n |  | n | $\begin{array}{\|c} \hline \text { Average } \\ \text { Grade } \end{array}$ |
| Languages Other Than English Level IV - Italian | 83 | 88.0 | 56 | 88.7 | 6 | 79.8 |  |  | 4 | 57.5 |
| Languages Other Than English Level IV - Latin | 20 | 83.8 |  |  |  |  | 2 | 81.5 | 4 | 81.9 |
| Languages Other Than English Level IV Spanish | 160 | 87.3 | 153 | 88.9 | 143 | 87.9 | 143 | 85.0 | 145 |  |
| Languages Other Than English Level IV - American Sign Language |  |  | 20 | 86.9 | 4 | 86.8 |  |  |  | 85.7 |
| Languages Other Than English Level IV - French | 42 | 83.9 | 31 | 91.4 | 53 | 93.7 | 30 | 78.7 | 39 | 77.6 |
| Languages Other Than English Level IV - German | 10 | 79.5 | 6 | 78.3 | 4 | 77.8 | 9 | 82.2 | 5 | 83.4 |
| Languages Other Than English Level IV - Russian | 14 | 92.4 | 10 | 86.0 | 16 | 83.5 |  |  |  |  |
| Languages Other Than English Level IV - Arabic | 2 | 80.5 | 6 | 82.3 | 20 | 87.9 | 10 | 89.9 | 17 | 87.3 |
| Languages Other Than English Level IV- Chinese | 22 | 80.1 | 50 | 86.0 | 45 | 84.9 | 57 | 85.2 | 98 | 83.8 |
| Languages Other Than English Level IV-Japanese | 16 | 85.5 | 4 | 79.8 | 15 | 79.1 | 6 | 75.5 | 6 | 72.8 |
| Languages Other Than English Level IV - Spanish For Spanish Speakers |  |  |  |  | 238 | 79.2 | 371 | 88.3 | 327 | 77.8 |
| Languages Other Than English Level V - French | 3 | 92.3 | 4 | 91.5 | 6 | 89.8 | 2 | 85.0 | 2 | 84.6 |
| Languages Other Than English Level V - Italian | 12 | 98.4 | 12 | 97.2 | 4 | 96.5 | 2 | 99.0 | 2 | 99.7 |
| Languages Other Than English Level V - Spanish | 12 | 63.9 | 33 | 86.4 | 22 | 83.5 | 13 | 80.2 | 18 | 80.9 |
| Languages Other Than English Level V - German |  |  |  |  | 6 | 87.7 | 8 | 93.5 | 16 | 87.0 |
| Languages Other Than English Level V -Arabic |  |  |  |  | 5 | 95.6 | 2 | 97.0 |  |  |
| Languages Other Than English Level VI - Italian |  |  |  |  |  |  | 2 | 98.0 |  |  |
| Languages Other Than English Level VI - Russian | 8 | 96.8 | 4 | 95.5 | 6 | 91.8 | 4 | 98.8 | 2 | 77.9 |
| Languages Other Than English Level VI - Spanish | 19 | 89.9 | 44 | 89.4 |  |  | 2 | 93.5 | 50 | 88.7 |
| Languages Other Than English-Hindi Level I | 33 | 91.9 | 12 | 95.7 | 17 | 94.1 | 20 | 95.5 | 10 | 95.0 |
| Languages Other Than English-Hindi Level II | 29 | 92.7 | 38 | 91.7 | 31 | 96.2 | 28 | 95.4 | 16 | 91.4 |
| Languages Other Than English-Hindi Level III | 16 | 96.2 | 26 | 96.2 | 24 | 94.7 | 28 | 95.9 | 18 | 93.0 |
| Languages Other Than English-Vietnamese Level III |  |  | 13 | 90.3 |  |  |  |  |  |  |
| Other Foreign Languages Level I |  |  | 42 | 77.6 | 23 | 83.4 | 33 | 82.8 | 24 | 71.0 |
| Other Foreign Languages Level II |  |  | 21 | 88.6 | 44 | 85.8 | 20 | 87.4 | 24 | 92.0 |
| Other Foreign Languages Level III |  |  | 11 | 92.8 | 16 | 91.3 | 22 | 89.8 | 8 | 88.4 |
| Other Foreign Languages Level IV |  |  | 4 | 95.8 | 2 | 92.5 | 10 | 89.1 | 10 | 83.9 |
| Other Foreign Languages Level V |  |  |  |  |  |  |  |  | 2 | 85.5 |
| Special Topics in Language and Culture | 4 | 94.8 |  |  | 6 | 96.0 | 14 | 97.9 |  |  |

## Appendix F

Secondary Students' Foreign Language Survey, Spring 2021-2022

|  | Strongly <br> Agree | Agree | Undecided | Disagree | Strongly <br> Disagree |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1. To improve my chances of getting a good job. | 38.6 | 35.9 | 11.6 | 8 | 5.9 |
| 2. Knowing a foreign language gives me employment opportuni- <br> ties over other applicants. | 41.4 | 38 | 9.9 | 5.8 | 4.9 |
| 3. To get a job that primarily uses another language (government <br> agent, translation, teaching, etc.) | 31.4 | 30.7 | 19 | 10.5 | 8.4 |
| 4. To help me get into a good college. | 25 | 31.3 | 23.3 | 13.2 | 7.2 |
| 5. To better understand other cultures in the United States and <br> abroad. | 39.9 | 39.1 | 11 | 6.1 | 3.9 |
| 6. Foreign language gives me self-confidence to understand <br> other cultures. | 37.3 | 38.6 | 14.7 | 4.4 | 5 |
| 7. To gain respect for people from other countries who are differ- <br> ent than me. | 37 | 38 | 14.3 | 6.9 | 3.8 |
| 8. Desire to communicate and affiliate with foreigners | 41 | 38.3 | 14.1 | 4.2 | 2.5 |
| 9. To communicate with people from other countries through <br> social media and in person. | 37.4 | 38.4 | 14 | 6.8 | 3.4 |
| 10. Foreign language will be useful when I travel abroad. | 47.2 | 37.1 | 10.9 | 2.3 | 2.5 |
| 11. Foreign language helps me relate to people from other <br> countries. | 35.6 | 38 | 16.4 | 6 | 4 |
| 12. I enjoy learning a foreign language to get Advanced Place- <br> ment Credit for college. | 28.2 | 28.4 | 22.3 | 13 | 8.1 |
| 13. I enjoy learning a foreign language to pass a college entrance <br> examination. | 25.5 | 29 | 24.7 | 13.3 | 7.6 |
| 14. My classmates are having a good time learning a foreign <br> language with me. | 25.3 | 36.1 | 24.1 | 8.7 | 5.8 |
| 15. I enjoy learning a foreign language because I am good at it. | 30.5 | 33 | 20.9 | 8.9 | 6.6 |
| 16. I relate well to others in my foreign language class. | 27.6 | 33 | 24 | 9.4 | 6 |
| 17. I feel comfortable speaking in my foreign language class. | 30.5 | 34.1 | 18.2 | 9.9 | 7.2 |
| 18. To live in a foreign country. | 28.4 | 27.2 | 21.3 | 12.9 | 10.1 |
| 19. To be able to socialize with people from other countries. | 41 | 39.7 | 11.8 | 3.4 | 4.2 |

