Table 1. Timing of Children Passing the OLDS

|  | Sample Size <br> (Percentage Distribution) |
| :--- | :--- |
| Children do not need to take OLDS | $13359(85.21 \%)$ |
| Children who needed to take OLDS and Passed OLDS at | $2319(14.79 \%)$ |
| Fall of kindergarten | $956(6.10 \%)$ |
| Spring of kindergarten | $539(3.44 \%)$ |
| Fall of first grade (limited sample tested) | $63(0.40 \%)$ |
| Spring of first grade | $417(2.66 \%)$ |
| Did not pass OLDS by the end of first grade | $344(2.19 \%)$ |

Table 2. Sample Size and Percentage Distribution of Spoken Language between the Parent and the Child

|  | Dyad of Mother- <br> Child Language <br> to Each Other | Dyad of Father- <br> Child Language <br> to Each Other |
| :--- | :--- | :--- |
|  <br> 1) the parent sometimes or never speaks the native <br> language to the child <br> 2) the parent often or very often speaks the native language <br> to the child <br>  | $\mathbf{1 3 3 8 7 ( 8 0 . 0 6 \% )}$ | $10790(80.81 \%)$ |

Table 3. Sample Size and Percentage Distribution of Spoken Language between the Parent and the Child by English Proficiency Test Taken at School, N=16376

| Spoken Language in Mother-Child Dyad | No Need to Take OLDS | Passed OLDS at Fall K | Passed OLDS at Spring K | Passed OLDS at $1^{\text {st }}$ Grade | Did not Pass OLDS by the end of $1^{\text {st }}$ Grade |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Child never speaks the native language to the parent \& |  |  |  |  |  |
| 1) the parent sometimes or never speaks the native language to the child | English Mono $n=12046$ | English Mono $\mathrm{n}=180$ | English-Dominant <br> Bilingual $n=45$ | Non-EnglishDominant Bilingual $\mathrm{n}=20$ | Non-English Mono $\mathrm{n}=18$ |
| 2) the parent often or very often speaks the native language to the child | English Mono $\mathrm{n}=81$ | English Mono $\mathrm{n}=34$ | English-Dominant <br> Bilingual $\mathrm{n}=25$ | Non-EnglishDominant Bilingual $\mathrm{n}=2$ | Non-English Mono $\mathrm{n}=0$ |
| Child sometimes speaks the native language to the parent \& |  |  |  |  |  |
| 3) the parent sometimes or never speaks the native language to the child | English-Dominant Bilingual $\mathrm{n}=653$ | English-Dominant Bilingual $n=302$ | Fluent Bilingual $n=27$ | Non-EnglishDominant Bilingual n=17 | Non-English Mono $\mathrm{n}=4$ |
| 4) the parent often or very often speaks the native language to the child | English-Dominant Bilingual $\mathrm{n}=231$ | English-Dominant Bilingual $\mathrm{n}=163$ | Fluent Bilingual $n=57$ | Non-EnglishDominant Bilingual $\mathrm{n}=22$ | Non-English Mono $\mathrm{n}=10$ |
| Child often speaks the native language to the parent \& |  |  |  |  |  |
| 5) the parent sometimes or never speaks the native language to the child | Fluent Bilingual $\mathrm{n}=26$ | Fluent Bilingual $n=22$ | Fluent Bilingual $n=2$ | Non-EnglishDominant Bilingual $\mathrm{n}=43$ | Non-English Mono $\mathrm{n}=1$ |
| 6) the parent often or very often speaks the native language to the child | Fluent Bilingual $\mathrm{n}=144$ | Fluent Bilingual $\mathrm{n}=186$ | Fluent Bilingual $\mathrm{n}=79$ | Non-EnglishDominant Bilingual $\mathrm{n}=187$ | Non-English Mono $\mathrm{n}=43$ |
| Child very often speaks the native language to the parent \& |  |  |  |  |  |
| 7) the parent sometimes or never speaks the native language to the child | Fluent Bilingual $n=26$ | Fluent Bilingual $n=21$ | Fluent Bilingual $n=4$ | Non-EnglishDominant Bilingual $\mathrm{n}=52$ | Non-English Mono $\mathrm{n}=3$ |
| 8) the parent often or very often speaks the native language to the child | Fluent Bilingual $\mathrm{n}=172$ | Fluent Bilingual $\mathrm{n}=277$ | Fluent Bilingual $n=205$ | Non-EnglishDominant Bilingual $\mathrm{n}=438$ | Non-English Mono $n=508$ |

Note: Sample size for English Mono, n=12341 (75.36\%); English-Dominant Bilingual, n=1419 (8.66\%); Fluent Bilingual, n=1248 (7.62\%) Non-English-Dominant Bilingual, $n=781(4.77 \%)$ and; Non-English Mono, $n=587$ (3.58\%).

Table 4. Children's Country of Origin by Language Group in Percentage

|  | English Monolingual | English- <br> Dominant <br> Bilingual | Fluent Bilingual | Non-English- <br> Dominant Bilingual | Non-English Monolingual | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Native-Born Non-Hispanic White ( $n=11063$ ) | 97.68 | 1.57 | 0.75 | 0 | 0 | 100 |
| Latin American Origins and Native-Born Hispanic ( $n=3790$ ) |  |  |  |  |  |  |
| Puerto Rico ( $\mathrm{n}=103$ ) | 18.45 | 36.89 | 29.13 | 10.68 | 4.85 | 2.72 |
| Central America ( $\mathrm{n}=194$ ) | 18.56 | 17.01 | 32.47 | 22.68 | 9.28 | 5.12 |
| South America ( $\mathrm{n}=204$ ) | 26.96 | 24.51 | 37.25 | 6.37 | 4.90 | 5.38 |
| Dominican Republic ( $\mathrm{n}=69$ ) | 4.35 | 24.64 | 44.93 | 20.29 | 5.80 | 1.82 |
| Mexico ( $\mathrm{n}=1139$ ) | 6.06 | 13.43 | 34.68 | 21.60 | 24.23 | 30.05 |
| Cuba ( $\mathrm{n}=60$ ) | 21.67 | 33.33 | 33.33 | 6.67 | 5.00 | 1.58 |
| Native-born Hispanic ( $\mathrm{n}=2021$ ) | 45.03 | 27.16 | 7.13 | 12.57 | 8.11 | 53.32 |
| Asian Origins and Native-Born Asian ( $n=1523$ ) |  |  |  |  |  |  |
| East Asia ( $\mathrm{n}=248$ ) | 19.35 | 22.98 | 42.34 | 11.69 | 3.63 | 16.28 |
| Thailand/Vietnam/Cambodia/Laos ( $\mathrm{n}=324$ ) | 5.86 | 17.90 | 50.00 | 19.75 | 6.48 | 21.27 |
| Other Southeast Asia ( $\mathrm{n}=330$ ) | 41.52 | 32.73 | 17.58 | 6.06 | 2.12 | 21.67 |
| India ( $\mathrm{n}=130$ ) | 25.38 | 29.23 | 36.15 | 6.15 | 3.08 | 8.54 |
| Native-born Asian ( $\mathrm{n}=491$ ) | 25.87 | 19.76 | 16.70 | 26.48 | 11.20 | 32.24 |

Table 5. Growth-Curve Results of Academic Achievements from Kindergarten to Fifth-Grade Children of Latin American Origins and Native-Born Hispanic

|  | READING |  | MATH |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Model 1 | Model 2 | Model 1 | Model 2 |
| Fixed Effects |  |  |  |  |
| Intercept | 51.53 (0.11)*** | 52.49 (0.27)*** | 52.58 (0.11)*** | 51.31 (0.27)*** |
| English-Dominant Bilingual | -0.90 (0.24)*** | -0.69 (0.22)** | -1.47 (0.24)*** | -1.01 (0.22)*** |
| Fluent Bilingual | -1.92 (0.29)*** | -0.94 (0.27)*** | -2.47 (0.29)*** | -1.26 (0.27)*** |
| Non-English-Dominant Bilingual | -4.56 (0.31)*** | -2.94 (0.29)*** | -6.74 (0.31)*** | -4.89 (0.29)*** |
| Non-English Monolingual | -5.35 (0.36)*** | -3.21 (0.34)*** | -7.15 (0.36)*** | -4.75 (0.34)*** |
| Public school |  | -2.04 (0.19)*** |  | -2.03 (0.18) ${ }^{* * *}$ |
| Student minority composition |  | -0.33 (0.11)** |  | -0.36 (0.11) ${ }^{* * *}$ |
| Providing instructional ESL |  | -0.17 (0.07)* |  | -0.00 (0.07) |
| Providing Title I service |  | 0.00 (0.03) |  | -0.01 (0.03) |
| Teachers and principle ESL experiences |  | 0.09 (0.06) |  | -0.11 (0.06) |
| Providing services for ESL families |  | 0.13 (0.04)*** |  | 0.00 (0.03) |
| Academic standards too low |  | 0.04 (0.06) |  | -0.02 (0.06) |
| School stability |  | 0.08 (0.08) |  | 0.12 (0.08) |
| Student learning environment |  | 0.23 (0.08)** |  | 0.37 (0.07)*** |
| Student academic performance |  | 0.48 (0.07)*** |  | 0.50 (0.07)*** |
| Teacher effort |  | -0.11 (0.08) |  | -0.24 (0.08)** |
| School supportive and teaching environments |  | 0.32 (0.09)*** |  | 0.21 (0.08)** |
| School work climate |  | 0.21 (0.09)* |  | 0.16 (0.09) |
| School physical facility/resources |  | -0.10 (0.10) |  | -0.23 (0.10)* |
| Rate of Change |  |  |  |  |
| Intercept | 0.22 (0.02)*** | 0.12 (0.05)* | -0.03 (0.02) | -0.52 (0.05)*** |
| English-Dominant Bilingual | 0.10 (0.06) | 0.17 (0.06)** | 0.22 (0.06)*** | 0.22 (0.06)*** |
| Fluent Bilingual | 0.09 (0.07) | 0.19 (0.07)** | 0.45 (0.06)*** | 0.39 (0.06)*** |
| Non-English-Dominant Bilingual | -0.12 (0.09) | -0.06 (0.10) | 0.78 (0.08)*** | 0.68 (0.09)*** |
| Non-English Monolingual | -0.44 (0.10)*** | -0.33 (0.11)** | 0.45 (0.10)*** | 0.36 (0.10)*** |
| Public school |  | 0.14 (0.05)* |  | 0.61 (0.06)*** |
| Student minority composition |  | -0.02 (0.06) |  | 0.07 (0.04) |
| Providing instructional ESL |  | 0.08 (0.04)* |  | -0.02 (0.03) |
| Providing Title I services |  | -0.01 (0.01) |  | 0.01 (0.01) |
| Teachers and principle ESL experiences |  | -0.10 (0.03)** |  | -0.00 (0.02) |


| Providing services for ESL families |  | -0.02 (0.01) |  | 0.05 (0.02)** |
| :---: | :---: | :---: | :---: | :---: |
| Academic standards too low |  | 0.004 (0.04) |  | -0.00 (0.02) |
| School stability |  | 0.02 (0.04) |  | 0.00 (0.02) |
| Student learning environment |  | -0.05 (0.05) |  | -0.01 (0.03) |
| Student academic performance |  | -0.20 (0.04)*** |  | -0.06 (0.02)** |
| Teacher effort |  | 0.07 (0.03)* |  | 0.12 (0.03)*** |
| School supportive and teaching environments |  | -0.06 (0.05) |  | 0.00 (0.03) |
| School work climate |  | -0.01 (0.04) |  | 0.03 (0.03) |
| School physical facility/resources |  | 0.11 (0.05)* |  | 0.06 (0.03)* |
| Variance Components |  |  |  |  |
| Within-person | 20.24 (0.29)*** | 20.39 (0.28)*** | 19.05 (0.28)*** | 19.16 (0.27)*** |
| Level 2 - between person |  |  |  |  |
| In initial status | 34.66 (0.86)*** | 27.73 (0.69)*** | 35.70 (0.86)*** | 29.68 (0.69)*** |
| In rate of change | 1.08 (0.08)*** | 1.03 (0.08)*** | 0.60 (0.08)*** | 0.59 (0.07)*** |
| Covariance | $-0.23 * * *$ | -0.25*** | -0.11** | -0.15** |
| Level 3 - between school |  |  |  |  |
| In initial status | 10.78 (0.79)*** | 3.11 (0.82)*** | 10.29 (1.10)*** | 2.75 (1.11)* |
| In rate of change | 0.19 (0.09)* | 0.18 (0.09) | 0.28 (0.12)* | 0.21 (0.12) |
| Covariance | $-0.42^{* * *}$ | -0.64*** | -0.48*** | -0.50*** |
| Model Fit Statistics |  |  |  |  |
| Deviance ( $=-2$ log-likelihood) | 521322.4 | 504113.2 | 519387.3 | 502691.2 |
| AIC | 521376.4 | 504269.2 | 519441.3 | 502847.2 |
| BIC | 521625.2 | 504986.6 | 519690.1 | 503564.7 |

Note. Standard errors are in parentheses. Models also controls for children's country of origins (Puerto Rico, Central America, South America, Dominican Republic, Mexico, Cuba, and native-born Hispanic with native-born non-Hispanic White as the reference group). Model 2 also controls for child's characteristics: being a boy, low birth weight, and attending center-based care before kindergarten; family's characteristics: mother married at birth, having siblings present, number of family members under age 18 at home, family's socioeconomic status, and living in single-parent family; and parental educational practices and home environment: parental educational expectations, parental participating in school events, home learning activities, and region and location of residence.
${ }^{*} p<.05 . \quad{ }^{* *} p<.01 . \quad{ }^{* * *} p<.001$.

## Table 6. Growth-Curve Results of Socioemotional Outcomes from Kindergarten to Fifth-Grade Children of Latin American Origins and Native-Born Hispanic

|  | APPROACH TO LEARNING |  | SELF-CONTROL |  | INTERPERSONAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Model 1 | Model 2 | Model 1 | Model 2 | Model 1 | Model 2 |
| Fixed Effects |  |  |  |  |  |  |
| Intercept | 0.015 (0.013) | -0.026 (0.038) | -0.052 (0.014)*** | $-0.153(0.040)^{* * *}$ | -0.002 (0.014) | 0.018 (0.040) |
| English-Dominant Bilingual | -0.013 (0.032) | -0.003 (0.031) | -0.009 (0.032) | 0.013 (0.031) | -0.035 (0.031) | -0.026 (0.030) |
| Fluent Bilingual | 0.015 (0.039) | 0.087 (0.038)* | -0.031 (0.038) | 0.032 (0.038) | -0.094 (0.038)* | -0.044 (0.037) |
| Non-English-Dominant Bilingual | -0.183 (0.042)*** | -0.053 (0.042) | -0.130 (0.042)** | -0.014 (0.042) | -0.255 (0.041)*** | -0.155 (0.042)*** |
| Non-English Monolingual | -0.316 (0.049)*** | $-0.169(0.048) * * *$ | -0.135 (0.049)** | -0.034 (0.049) | -0.365 (0.048)*** | -0.269 (0.048)*** |
| Public school |  | 0.101 (0.029)*** |  | 0.157 (0.032)*** |  | 0.067 (0.032)* |
| Student minority composition |  | 0.014 (0.017) |  | -0.027 (0.019) |  | 0.001 (0.020) |
| Providing instructional ESL |  | 0.021 (0.012) |  | 0.018 (0.014) |  | 0.042 (0.014)** |
| Providing Title I service |  | 0.002 (0.004) |  | 0.002 (0.005) |  | 0.006 (0.005) |
| Teachers and principle ESL experiences |  | -0.011 (0.010) |  | -0.022 (0.011)* |  | -0.016 (0.012) |
| Providing services for ESL families |  | -0.009 (0.005) |  | 0.004 (0.006) |  | 0.008 (0.006) |
| Academic standards too low |  | 0.007 (0.010) |  | 0.029 (0.011)** |  | 0.052 (0.011)*** |
| School stability |  | -0.003 (0.013) |  | -0.032 (0.014)* |  | -0.050 (0.014)*** |
| Student learning environment |  | 0.007 (0.012) |  | 0.002 (0.013) |  | -0.015 (0.013) |
| Student academic performance |  | 0.022 (0.011)* |  | 0.028 (0.013)* |  | 0.004 (0.013) |
| Teacher effort |  | -0.041 (0.012)*** |  | -0.026 (0.013)* |  | 0.004 (0.013) |
| School supportive and teaching environments |  | $0.104(0.013)^{* * *}$ |  | $0.107(0.015)^{* * *}$ |  | $0.122(0.015)^{* * *}$ |
| School work climate |  | -0.038 (0.014)** |  | -0.004 (0.015) |  | -0.025 (0.015) |
| School physical facility/resources |  | $-0.060(0.016)^{* * *}$ |  | -0.057 (0.018)** |  | -0.030 (0.018) |
| Rate of Change |  |  |  |  |  |  |
| Intercept | -0.004 (0.004) | 0.005 (0.008) | 0.028 (0.004)*** | 0.034 (0.009)** | 0.007 (0.004) | 0.017 (0.009) |
| English-Dominant Bilingual | 0.004 (0.009) | 0.011 (0.009) | -0.010 (0.009) | -0.004 (0.009) | -0.012 (0.009) | -0.004 (0.009) |
| Fluent Bilingual | 0.009 (0.009) | 0.021 (0.010)* | 0.003 (0.010) | 0.014 (0.010) | 0.019 (0.010) | 0.033 (0.010)** |
| Non-English-Dominant Bilingual | 0.057 (0.012)*** | 0.067 (0.013)*** | 0.036 (0.013)** | 0.043 (0.014)** | 0.056 (0.014)*** | 0.066 (0.014)*** |
| Non-English Monolingual | 0.043 (0.015)** | 0.057 (0.015)*** | -0.030 (0.016) | -0.015 (0.016) | 0.028 (0.016) | 0.041 (0.017)* |
| Public school |  | -0.009 (0.009) |  | -0.003 (0.010) |  | -0.003 (0.010) |
| Student minority composition |  | 0.002 (0.006) |  | 0.014 (0.007)* |  | 0.009 (0.007) |
| Providing instructional ESL |  | -0.014 (0.004)** |  | -0.010 (0.005)* |  | -0.012 (0.005)* |
| Providing Title I services |  | -0.004 (0.001)** |  | -0.004 (0.002)* |  | -0.005 (0.002)** |
| Teachers and principle ESL experiences |  | 0.005 (0.004) |  | 0.004 (0.004) |  | 0.007 (0.004) |


| Providing services for ESL families |  | 0.002 (0.002) |  | 0.000 (0.002) |  | -0.002 (0.002) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic standards too low |  | -0.002 (0.004) |  | -0.005 (0.004) |  | -0.010 (0.004)** |
| School stability |  | 0.010 (0.004)* |  | 0.018 (0.004)*** |  | 0.023 ().005) ${ }^{* * *}$ |
| Student learning environment |  | 0.003 (0.005) |  | 0.002 (0.005) |  | 0.004 (0.005) |
| Student academic performance |  | -0.005 (0.004) |  | -0.001 (0.004) |  | 0.006 (0.004) |
| Teacher effort |  | 0.009 (0.004)* |  | 0.006 (0.004) |  | 0.000 (0.004) |
| School supportive and teaching environments |  | 0.004 (0.005) |  | 0.010 (0.005) |  | 0.004 (0.005) |
| School work climate |  | 0.003 (0.004) |  | -0.005 (0.005) |  | -0.006 (0.005) |
| School physical facility/resources |  | 0.011 (0.005)* |  | 0.015 (0.006)** |  | 0.012 (0.006)* |
| Variance Components |  |  |  |  |  |  |
| Within-person | 0.416 (0.15)*** | 0.416 (0.015) ${ }^{* * *}$ | $0.506(0.016)^{* * *}$ | 0.503 (0.016) ${ }^{* * *}$ | $0.535(0.017)^{* * *}$ | $0.531(0.017)^{* * *}$ |
| Level 2 - between person |  |  |  |  |  |  |
| In initial status | 0.541 (0.022)*** | 0.453 (0.022)*** | 0.452 (0.015)*** | 0.397 (0.016)*** | 0.395 (0.018)*** | 0.335 (0.018)*** |
| In rate of change | 0.010 (0.002)*** | 0.009 (0.002)*** | 0.008 (0.002)*** | $0.008(0.002)^{* * *}$ | 0.007 (0.002)** | 0.007 (0.002)** |
| Covariance | -0.32*** | -0.42*** | -0.46*** | -0.52*** | -0.34*** | -0.42*** |
| Level 3 - between school |  |  |  |  |  |  |
| In initial status | 0.086 (0.004)*** | $0.075(0.006)^{* * *}$ | 0.117 (0.006)*** | 0.103 (0.006)*** | 0.117 (0.007)*** | 0.105 (0.007)*** |
| In rate of change | 0.007 (0.002)** | 0.006 (0.002)*** | 0.009 (0.002)*** | 0.008 (0.002)*** | 0.009 (0.002)*** | 0.008 (0.002)*** |
| Covariance | -0.72*** | -0.80*** | -0.77*** | -0.81*** | -0.78*** | -0.82*** |
| Model Fit Statistics |  |  |  |  |  |  |
| Deviance (=-2log-likelihood) | 135917.6 | 133166.6 | 138522.6 | 136658.1 | 139013.8 | 136730.9 |
| AIC | 135973.6 | 133362.6 | 138578.6 | 136854.1 | 139069.8 | 136927.0 |
| BIC | 136222.7 | 134234.1 | 138827.2 | 137724.1 | 139318.3 | 137796.4 |

Note. Standard errors are in parentheses. Models also controls for children's country of origins (Puerto Rico, Central America, South America, Dominican Republic, Mexico, Cuba, and native-born Hispanic with native-born non-Hispanic White as the reference group). Model 2 also controls for child's characteristics: being a boy, low birth weight, and attending center-based care before kindergarten; family's characteristics: mother married at birth, having siblings present, number of family members under age 18 at home, family's socioeconomic status, and living in single-parent family; and parental educational practices and home environment: parental educational expectations, parental participating in school events, home learning activities, and region and location of residence.
${ }^{*} p<.05 . \quad{ }^{* *} p<.01 . \quad{ }^{* * *} p<.001$.

|  | INTERNALIZING |  | EXTERNALIZING |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Model 1 | Model 2 | Model 1 | Model 2 |
| Fixed Effects |  |  |  |  |
| Intercept | $-0.049(0.013)^{* * *}$ | 0.048 (0.038) | 0.009 (0.012) | 0.050 (0.038) |
| English-Dominant Bilingual | 0.027 (0.031) | 0.008 (0.031) | -0.018 (0.034) | -0.040 (0.033) |
| Fluent Bilingual | -0.019 (0.037) | -0.084 (0.037)* | -0.074 (0.041) | -0.137 (0.040)*** |
| Non-English-Dominant Bilingual | 0.031 (0.040) | -0.079 (0.042) | 0.013 (0.044) | -0.089 (0.044)* |
| Non-English Monolingual | 0.173 (0.047)*** | 0.041 (0.049) | -0.019 (0.051) | -0.089 (0.051) |
| Public school |  | -0.079 (0.031)** |  | -0.171 (0.028)*** |
| Student minority composition |  | 0.027 (0.020) |  | 0.008 (0.017) |
| Providing instructional ESL |  | -0.003 (0.014) |  | -0.002 (0.012) |
| Providing Title I service |  | -0.004 (0.005) |  | 0.011 (0.004)** |
| Teachers and principle ESL experiences |  | 0.010 (0.012) |  | 0.021 (0.010)* |
| Providing services for ESL families |  | 0.009 (0.006) |  | 0.007 (0.005) |
| Academic standards too low |  | 0.004 (0.012) |  | 0.004 (0.010) |
| School stability |  | 0.023 (0.014) |  | 0.005 (0.012) |
| Student learning environment |  | -0.010 (0.013) |  | 0.002 (0.011) |
| Student academic performance |  | -0.010 (0.013) |  | $-0.046(0.011)^{* * *}$ |
| Teacher effort |  | 0.031 (0.013)* |  | 0.029 (0.011)** |
| School supportive and teaching environments |  | -0.048 (0.015)** |  | $-0.057(0.013)^{* * *}$ |
| School work climate |  | 0.000 (0.005) |  | 0.013 (0.013) |
| School physical facility/resources |  | 0.021 (0.018) |  | -0.007 (0.016) |
| Rate of Change |  |  |  |  |
| Intercept | 0.044 (0.004)*** | 0.043 (0.009)*** | 0.017 (0.003)*** | 0.018 (0.007)** |
| English-Dominant Bilingual | -0.007 (0.010) | -0.012 (0.010) | 0.016 (0.008) | 0.014 (0.008) |
| Fluent Bilingual | -0.017 (0.011) | -0.026 (0.011)* | 0.006 (0.009) | 0.002 (0.010) |
| Non-English-Dominant Bilingual | -0.006 (0.014) | -0.012 (0.015) | -0.025 (0.012)* | -0.028 (0.013)* |
| Non-English Monolingual | 0.004 (0.016) | -0.004 (0.018) | 0.014 (0.014) | 0.004 (0.015) |
| Public school |  | 0.013 (0.010) |  | 0.017 (0.008)* |
| Student minority composition |  | -0.013 (0.007) |  | 0.000 (0.006) |
| Providing instructional ESL |  | 0.007 (0.005) |  | 0.002 (0.004) |
| Providing Title I services |  | 0.004 (0.002)** |  | -0.001 (0.001) |
| Teachers and principle ESL experiences |  | -0.001 (0.004) |  | -0.005 (0.003) |
| Providing services for ESL families |  | -0.003 (0.002) |  | -0.002 (0.002) |
| Academic standards too low |  | -0.007 (0.004) |  | -0.005 (0.003) |

## School stability

Student learning environment
Student academic performance
Teacher effort
School supportive and teaching environments
School work climate
School physical facility/resources
Variance Components
Within-person
Level 2 - between person
In initial status
In rate of change
Covariance
Level 3 - between school
In initial status
In rate of change
Covariance
Model Fit Statistics
Deviance (= -2log-likelihood)
AIC
BIC

| -0.000 (0.005) |  | -0.000 (0.004) |
| :---: | :---: | :---: |
| 0.003 (0.005) |  | 0.001 (0.004) |
| 0.001 (0.004) |  | 0.007 (0.004) |
| -0.005 (0.004) |  | -0.007 (0.004) |
| -0.018 (0.005)** |  | -0.011 (0.005)* |
| -0.003 (0.005) |  | -0.010 (0.004)* |
| 0.001 (0.006) |  | 0.012 (0.005)* |
| $0.604(0.015)^{* * *}$ | $0.623(0.012)^{* * *}$ | $0.387(0.013)^{* * *}$ |
| 0.323 (0.015)*** | $0.661(0.012)^{* * *}$ | $0.583(0.013)^{* * *}$ |
| 0.014 (0.003)*** | $0.098(0.001)^{* * *}$ | $0.098(0.002)^{* * *}$ |
| -0.48*** | -0.56*** | -0.59*** |
| $0.085(0.004)^{* * *}$ | 0.070 (0.001) ${ }^{* * *}$ | $0.061(0.002)^{* * *}$ |
| $0.006(0.003)^{* *}$ | $0.004(0.001)^{* * *}$ | $0.004(0.001)^{* * *}$ |
| -0.80*** | -0.62*** | -0.73*** |
| 143206.9 | 133480.7 | 131570.2 |
| 143402.9 | 133536.7 | 131766.2 |
| 144273.1 | 133785.6 | 132637.1 |

Note. Standard errors are in parentheses. Models also controls for children's country of origins (Puerto Rico, Central America, South America, Dominican Republic, Mexico, Cuba, and native-born Hispanic with native-born non-Hispanic White as the reference group). Model 2 also controls for child's characteristics: being a boy, low birth weight, and attending center-based care before kindergarten; family's characteristics: mother married at birth, having siblings present, number of family members under age 18 at home, family's socioeconomic status, and living in single-parent family; and parental educational practices and home environment: parental educational expectations, parental participating in school events, home learning activities, and region and location of residence. * $p<.05 . \quad{ }^{* *} p<.01 . \quad$ *** $p<.001$

## Table 7. Growth-Curve Results of Academic Outcomes from Kindergarten to Fifth-Grade Children of Asian Origins and Native-Born Asian

|  | READING |  | MATH |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Model 1 | Model 2 | Model 1 | Model 2 |
| Fixed Effects |  |  |  |  |
| Intercept | 51.37 (0.11)*** | 52.18 (0.28)*** | 52.31 (0.11)*** | 50.64 (0.27)*** |
| English-Dominant Bilingual | -2.02 (0.24)*** | -1.27 (0.22)*** | -3.00 (0.24)*** | -1.97 (0.22)*** |
| Fluent Bilingual | -2.49 (0.33)*** | -1.12 (0.30)*** | -3.57 (0.32)*** | -1.92 (0.30)*** |
| Non-English-Dominant Bilingual | -6.30 (0.35)*** | -4.02 (0.33)*** | -8.84 (0.35)*** | -6.46 (0.33)*** |
| Non-English Monolingual | -7.02 (0.46)*** | -4.17 (0.44)*** | -8.90 (0.46)*** | -5.78 (0.43)*** |
| Public school |  | -1.96 (0.19)*** |  | -1.92 (0.18) ${ }^{* * *}$ |
| Student minority composition |  | -0.33 (0.12)** |  | -0.52 (0.12)*** |
| Providing instructional ESL |  | -0.42 (0.11)*** |  | -0.20 (0.11) |
| Providing Title I services |  | -0.01 (0.03) |  | -0.03 (0.03) |
| Teachers and principle ESL experiences |  | 0.16 (0.08)* |  | -0.04 (0.08) |
| Providing services for ESL families |  | 0.10 (0.04)** |  | -0.03 (0.04) |
| Academic standards too low |  | 0.04 (0.06)* |  | -0.07 (0.05) |
| School stability |  | 0.12 (0.08) |  | 0.17 (0.08)* |
| Student learning environment |  | 0.20 (0.08)** |  | 0.38 (0.08)*** |
| Student academic performance |  | 0.45 (0.08)*** |  | 0.45 (0.07)*** |
| Teacher effort |  | -0.06 (0.08) |  | -0.20 (0.08)** |
| School supportive and teaching environments |  | 0.34 (0.09)*** |  | 0.16 (0.09) |
| School work climate |  | 0.16 (0.09) |  | 0.13 (0.09) |
| School physical facility/resources |  | -0.07 (0.11) |  | -0.24 (0.10)* |
| Rate of Change |  |  |  |  |
| Intercept | 0.21 (0.02)*** | 0.09 (0.05) | -0.03 (0.02) | -0.51 (0.05) ${ }^{* * *}$ |
| English-Dominant Bilingual | -0.01 (0.07) | 0.08 (0.07) | 0.22 (0.06)*** | 0.21 (0.06)*** |
| Fluent Bilingual | -0.08 (0.08) | -0.01 (0.08) | 0.42 (0.07)*** | 0.34 (0.08)*** |
| Non-English-Dominant Bilingual | -0.24 (0.12)* | -0.16 (0.12) | 0.73 (0.11)*** | 0.64 (0.11)*** |
| Non-English Monolingual | -0.65 (0.20)** | -0.55 (0.20)** | 0.13 (0.19) | 0.07 (0.18) |
| Public school |  | 0.25 (0.06)*** |  | 0.59 (0.06)*** |
| Student minority composition |  | -0.13 (0.04)** |  | 0.06 (0.04) |
| Providing instructional ESL |  | 0.08 (0.04)* |  | 0.04 (0.04) |
| Providing Title I services |  | $-0.03(0.01)^{* *}$ |  | -0.02 (0.01) |
| Teachers and principle ESL experiences |  | -0.04 (0.03) |  | -0.00 (0.03) |


| Providing services for ESL families |  | -0.01 (0.01) |  | 0.03 (0.01)** |
| :---: | :---: | :---: | :---: | :---: |
| Academic standards too low |  | -0.00 (0.02) |  | 0.01 (0.02) |
| School stability |  | 0.05 (0.03) |  | -0.02 (0.03) |
| Student learning environment |  | 0.06 (0.03) |  | -0.02 (0.03) |
| Student academic performance |  | -0.08 (0.02)** |  | -0.05 (0.02)* |
| Teacher effort |  | 0.00 (0.03) |  | 0.14 (0.03)*** |
| School supportive and teaching environments |  | -0.05 (0.04) |  | 0.02 (0.03) |
| School work climate |  | -0.00 (0.03) |  | 0.04 (0.03) |
| School physical facility/resources |  | 0.09 (0.04)** |  | 0.20 (0.05)*** |
| Variance Components |  |  |  |  |
| Within-person | 19.91 (0.32)*** | 20.04 (0.30)*** | 18.72 (0.31)*** | 18.84 (0.29)*** |
| Level 2 - between person |  |  |  |  |
| In initial status | 35.78 (1.02)*** | 28.62 (0.78)*** | 35.74 (0.96)*** | 29.32 (0.76)*** |
| In rate of change | 1.14 (0.09)*** | 1.09 (0.08)*** | 0.60 (0.08)*** | 0.58 (0.08)*** |
| Covariance | -0.26 *** | -0.30 *** | -0.11 *** | -0.62 (0.20)*** |
| Level 3 - between school |  |  |  |  |
| In initial status | 11.45 (1.05)*** | 3.31 (1.05) *** | 10.89 (0.46)*** | 2.55 (0.46)*** |
| In rate of change | 0.21 (0.08)*** | 0.20 (0.08)*** | 0.28 (0.09)*** | 0.20 (0.10)* |
| Covariance | -0.41 *** | -0.67 *** | -0.44 *** | -2.27 (0.45)*** |
| Model Fit Statistics |  |  |  |  |
| Deviance (=-2log-likelihood) | 441500.7 | 427070.5 | 440100.8 | 425905.2 |
| AIC | 441550.7 | 427222.5 | 440150.9 | 426057.1 |
| BIC | 441776.9 | 427909.1 | 440377.1 | 426743.7 |

Note. Standard errors are in parentheses. Models also controls for children's country of origins (East Asia, Thailand/Vietnam/Cambodia/Laos, other Southeast Asia, India, and native-born Asian with the native-born non-Hispanic White as the reference group). Model 2 also controls for child's characteristics: being a boy, low birth weight, and attending center-based care before kindergarten; family's characteristics: mother married at birth, having siblings present, number of family members under age 18 at home, family's socioeconomic status, and living in single-parent family; and parental educational practices and home environment: parental educational expectations, parental participating in school events, home learning activities, and region and location of residence.

* $p<.05 . \quad{ }^{* *} p<.01 . \quad{ }^{* * *} p<.001$.


## Table 8. Growth-Curve Results of Socioemotional Outcomes from Kindergarten to Fifth-Grade Children of Asian Origins and Native-Born Asians

|  | APPROACH TO LEARNING |  | SELF-CONTROL |  | INTERPERSONAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Model 1 | Model 2 | Model 1 | Model 2 | Model 1 | Model 2 |
| Fixed Effects |  |  |  |  |  |  |
| Intercept | -0.042 (0.013)*** | $-0.104(0.039)^{* *}$ | -0.083 (0.014)*** | -0.186 (0.041)*** | -0.023 (0.014) | -0.010 (0.041) |
| English-Dominant Bilingual | -0.128 (0.032)*** | -0.075 (0.031)* | -0.095 (0.032)** | -0.037 (0.031) | -0.091 (0.031)** | -0.049 (0.030) |
| Fluent Bilingual | -0.107 (0.043)* | -0.010 (0.042) | -0.109 (0.043)** | -0.016 (0.042) | -0.161 (0.042)*** | -0.087 (0.041)* |
| Non-English-Dominant Bilingual | -0.477 (0.047)*** | -0.274 (0.047)*** | -0.299 (0.048)*** | -0.118 (0.048)* | -0.455 (0.047)*** | -0.294 (0.047)*** |
| Non-English Monolingual | -0.419 (0.063)*** | $-0.230(0.062)^{* * *}$ | -0.283 (0.064) ${ }^{* * *}$ | -0.145 (0.064)* | $-0.444(0.063) * * *$ | -0.311 (0.062)*** |
| Public school |  | 0.089 (0.030)** |  | $0.135(0.033)^{* * *}$ |  | 0.049 (0.033) |
| Student minority composition |  | 0.052 (0.019)** |  | -0.018 (0.021) |  | 0.022 (0.024) |
| Providing instructional ESL |  | 0.002 (0.018) |  | 0.005 (0.021) |  | 0.052 (0.021)** |
| Providing Title I service |  | 0.001 (0.004) |  | 0.004 (0.005) |  | 0.006 (0.005) |
| Teachers and principle ESL experiences |  | -0.010 (0.013) |  | -0.025 (0.014) |  | -0.030 (0.014)* |
| Providing services for ESL families |  | -0.015 (0.006)** |  | 0.004 (0.007) |  | 0.006 (0.007) |
| Academic standards too low |  | 0.006 (0.010) |  | 0.038 (0.012)*** |  | 0.062 (0.012)*** |
| School stability |  | -0.002 (0.013) |  | -0.025 (0.014) |  | -0.040 (0.015)** |
| Student learning environment |  | 0.005 (0.012) |  | -0.003 (0.014) |  | -0.015 (0.014) |
| Student academic performance |  | 0.021 (0.012) |  | 0.021 (0.013) |  | 0.005 (0.013) |
| Teacher effort |  | -0.033 (0.012)** |  | -0.010 (0.013) |  | 0.016 (0.013) |
| School supportive and teaching environments |  | $0.116(0.014)^{* * *}$ |  | $0.113(0.015)^{* * *}$ |  | $0.134(0.015)^{* * *}$ |
| School work climate |  | -0.024 (0.014) |  | 0.007 (0.016) |  | -0.013 (0.016) |
| School physical facility/resources |  | $-0.056(0.017)^{* * *}$ |  | -0.050 (0.019)** |  | -0.026 (0.019) |
| Rate of Change |  |  |  |  |  |  |
| Intercept | -0.003 (0.004) | 0.004 (0.008) | 0.028 (0.004)*** | 0.030 (0.009)** | 0.007 (0.004) | 0.015 (0.009) |
| English-Dominant Bilingual | 0.018 (0.009)* | 0.025 (0.009)** | 0.014 (0.010) | 0.018 (0.010)* | 0.007 (0.010) | 0.013 (0.010) |
| Fluent Bilingual | 0.022 (0.011)* | 0.034 (0.011)** | 0.014 (0.011) | 0.022 (0.012)* | 0.037 (0.012)** | 0.046 (0.012)*** |
| Non-English-Dominant Bilingual | 0.097 (0.016)*** | $0.104(0.016)^{* * *}$ | 0.051 (0.017)** | 0.054 (0.017)** | $0.085(0.018)^{* * *}$ | 0.089 (0.018)*** |
| Non-English Monolingual | 0.037 (0.029) | 0.045 (0.028) | 0.018 (0.030) | 0.027 (0.030) | 0.045 (0.031) | 0.050 (0.031) |
| Public school |  | -0.001 (0.009) |  | 0.006 (0.010) |  | 0.002 (0.010) |
| Student minority composition |  | -0.009 (0.007) |  | 0.012 (0.007) |  | 0.002 (0.007) |
| Providing instructional ESL |  | 0.000 (0.007) |  | -0.004 (0.008) |  | -0.011 (0.008) |
| Providing Title I services |  | -0.004 (0.001)** |  | -0.00 5 (0.002)** |  | -0.005 (0.002)** |
| Teachers and principle ESL experiences |  | 0.011 (0.004)* |  | 0.009 (0.005) |  | 0.016 (0.005)** |


| Providing services for ESL families | 0.003 (0.002) |  | -0.001 (0.002) |  | -0.002 (0.002) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic standards too low | -0.004 (0.004) |  | -0.008 (0.004)* |  | -0.013 (0.004)** |  |
| School stability | 0.010 (0.004)* |  | 0.015 (0.005)** |  | 0.021 (0.005)*** |  |
| Student learning environment | 0.003 (0.005) |  | 0.003 (0.006) |  | 0.002 (0.006) |  |
| Student academic performance | -0.003 (0.004) |  | 0.002 (0.004) |  | 0.005 (0.004) |  |
| Teacher effort | 0.005 (0.004) |  | 0.002 (0.004) |  | -0.003 (0.004) |  |
| School supportive and teaching environments | 0.004 (0.005) |  | 0.011 (0.005)* |  | 0.002 (0.006) |  |
| School work climate | -0.001 (0.004) |  | -0.009 (0.005) |  | -0.010 (0.005)* |  |
| School physical facility/resources | 0.012 (0.005)* |  | 0.013 (0.006)* |  | 0.011 (0.006) |  |
| Variance Components |  |  |  |  |  |  |
| Within-person | $0.411(0.010)^{* * *}$ | 0.410 (0.010) ${ }^{* * *}$ | 0.497 (0.010)*** | $0.494(0.010)^{* * *}$ | $0.528(0.010)^{* * *}$ | 0.523 (0.011)*** |
| Level 2 - between person |  |  |  |  |  |  |
| In initial status | 0.536 (0.010)*** | 0.449 (0.010)*** | 0.454 (0.010)*** | 0.398 (0.010)*** | 0.396 (0.011) ${ }^{* * *}$ | 0.337 (0.011)*** |
| In rate of change | 0.008 (0.002)*** | 0.008 (0.002)*** | 0.008 (0.003)** | 0.007 (0.003)* | 0.007 (0.003)* | 0.007 (0.003)* |
| Covariance | -0.30*** | -0.41*** | -0.46*** | -0.52*** | -0.34*** | -0.42*** |
| Level 3 - between school |  |  |  |  |  |  |
| In initial status | 0.094 (0.005)*** | 0.081 (0.004)*** | 0.125 (0.005)*** | 0.110 (0.002)*** | 0.128 (0.005)*** | 0.114 (0.005)*** |
| In rate of change | 0.007 (0.002)*** | 0.006 (0.002)*** | 0.010 (0.002)*** | $0.009(0.003)^{* * *}$ | 0.010 (0.002)*** | 0.009 (0.002)*** |
| Covariance | -0.72*** | -0.81*** | -0.78*** | -0.82*** | -0.78*** | -0.82*** |
| Model Fit Statistics |  |  |  |  |  |  |
| Deviance (=-2log-likelihood) | 128476.1 | 125797.9 | 131062.4 | 129212.7 | 131771.2 | 129555.7 |
| AIC | 128528.1 | 125987.9 | 131114.4 | 129402.7 | 131823.2 | 129747.7 |
| BIC | 128758.0 | 126827.8 | 131344.0 | 130241.3 | 132052.6 | 130594.6 |

Note. Standard errors are in parentheses. Models also controls for children's country of origins (East Asia, Thailand/Vietnam/Cambodia/Laos, other Southeast Asia, India, and native-born Asian with the native-born non-Hispanic White as the reference group). Model 2 also controls for child's characteristics: being a boy, low birth weight, and attending center-based care before kindergarten; family's characteristics: mother married at birth, having siblings present, number of family members under age 18 at home, family's socioeconomic status, and living in single-parent family; and parental educational practices and home environment: parental educational expectations, parental participating in school events, home learning activities, and region and location of residence.

* $p<.05 . \quad{ }^{* *} p<.01 . \quad{ }^{* * *} p<.001$.

Table 8, cont.

|  | INTERNALIZING |  | EXTERNALIZING |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Model 1 | Model 2 | Model 1 | Model 2 |
| Fixed Effects |  |  |  |  |
| Intercept | -0.028 (0.013)* | 0.076 (0.040)* | 0.034 (0.012)** | 0.089 (0.039)* |
| English-Dominant Bilingual | 0.072 (0.031)* | 0.028 (0.031) | 0.052 (0.034) | -0.010 (0.033) |
| Fluent Bilingual | 0.044 (0.041) | -0.033 (0.042) | 0.044 (0.045) | -0.041 (0.044) |
| Non-English-Dominant Bilingual | 0.144 (0.046)** | -0.007 (0.048) | 0.166 (0.050)*** | 0.005 (0.050) |
| Non-English Monolingual | 0.185 (0.062)** | 0.008 (0.063) | 0.036 (0.066) | -0.049 (0.066) |
| Public school |  | -0.052 (0.031) |  | -0.149 (0.029)*** |
| Student minority composition |  | -0.004 (0.021) |  | -0.013 (0.018) |
| Providing instructional ESL |  | 0.023 (0.021) |  | -0.033 (0.018) |
| Providing Title I service |  | -0.005 (0.005) |  | 0.011 (0.004)* |
| Teachers and principle ESL experiences |  | 0.014 (0.014) |  | 0.039 (0.012)*** |
| Providing services for ESL families |  | 0.001 (0.006) |  | 0.008 (0.005) |
| Academic standards too low |  | -0.008 (0.012) |  | -0.003 (0.010) |
| School stability |  | 0.022 (0.014) |  | 0.005 (0.012) |
| Student learning environment |  | -0.011 (0.014) |  | 0.006 (0.012) |
| Student academic performance |  | -0.006 (0.013) |  | -0.043 (0.011)*** |
| Teacher effort |  | 0.023 (0.014) |  | 0.015 (0.012) |
| School supportive and teaching environments |  | -0.037 (0.016)* |  | -0.058 (0.013)*** |
| School work climate |  | 0.000 (0.016) |  | 0.007 (0.014) |
| School physical facility/resources |  | 0.021 (0.019) |  | -0.006 (0.016) |
| Rate of Change |  |  |  |  |
| Intercept | 0.043 (0.004)*** | 0.049 (0.009)*** | 0.016 (0.003)*** | 0.022 (0.008)** |
| English-Dominant Bilingual | -0.006 (0.010) | -0.010 (0.011) | 0.004 (0.009) | 0.003 (0.009) |
| Fluent Bilingual | -0.013 (0.012) | -0.019 (0.013) | -0.007 (0.010) | -0.014 (0.011) |
| Non-English-Dominant Bilingual | -0.017 (0.018) | -0.017 (0.019) | -0.044 (0.016)** | -0.048 (0.016)** |
| Non-English Monolingual | 0.049 (0.033) | 0.049 (0.033) | 0.056 (0.027)* | 0.041 (0.027) |
| Public school |  | 0.006 (0.010) |  | 0.009 (0.008) |
| Student minority composition |  | -0.006 (0.007) |  | 0.003 (0.006) |
| Providing instructional ESL |  | -0.008 (0.008) |  | 0.008 (0.007) |
| Providing Title I services |  | 0.003 (0.001)* |  | -0.000 (0.001) |
| Teachers and principle ESL experiences |  | -0.011 (0.005)* |  | -0.012 (0.004)** |
| Providing services for ESL families |  | -0.001 (0.002) |  | -0.002 (0.002) |


| Academic standards too low | -0.003 (0.004) |  |  | -0.001 (0.003) |
| :---: | :---: | :---: | :---: | :---: |
| School stability |  | 0.000 (0.005) |  | 0.002 (0.004) |
| Student learning environment |  | 0.006 (0.006) |  | 0.002 (0.005) |
| Student academic performance |  | -0.004 (0.004) |  | 0.003 (0.004) |
| Teacher effort |  | -0.004 (0.004) |  | -0.004 (0.004) |
| School supportive and teaching environments |  | -0.023 (0.006)*** |  | -0.013 (0.005)** |
| School work climate |  | -0.002 (0.005) |  | -0.008 (0.004) |
| School physical facility/resources |  | -0.000 (0.006) |  | 0.012 (0.005)* |
| Variance Components |  |  |  |  |
| Within-person | $0.602(0.010)^{* * *}$ | 0.60 (0.010)*** | $0.378(0.011)^{* * *}$ | 0.377 (0.011)*** |
| Level 2 - between person |  |  |  |  |
| In initial status | 0.349 (0.011)*** | 0.327 (0.011)*** | 0.667 (0.012) ${ }^{* * *}$ | 0.588 (0.012)*** |
| In rate of change | 0.014 (0.002)*** | 0.014 (0.002)*** | 0.010 (0.002)*** | 0.010 (0.002)*** |
| Covariance | -0.45*** | -0.49*** | -0.56*** | -0.59*** |
| Level 3 - between school |  |  |  |  |
| In initial status | 0.090 (0.005)*** | $0.088(0.005)^{* * *}$ | $0.072(0.005)^{* * *}$ | $0.064(0.005)^{* * *}$ |
| In rate of change | 0.007 (0.002)*** | 0.006 (0.002)** | 0.005 (0.002)** | 0.004 (0.002)* |
| Covariance | -0.74*** | -0.79*** | -0.63*** | -0.75*** |
| Model Fit Statistics |  |  |  |  |
| Deviance (=-2log-likelihood) | 136624.5 | 135904.8 | 126053.9 | 124196.4 |
| AIC | 136676.5 | 136096.8 | 126105.9 | 124388.4 |
| BIC | 136906.1 | 136944.5 | 126335.6 | 125236.6 |

Note. Standard errors are in parentheses. Models also controls for children's country of origins (East Asia, Thailand/Vietnam/Cambodia/Laos, other Southeast Asia, India, and native-born Asian with the native-born non-Hispanic White as the reference group). Model 2 also controls for child's characteristics: being a boy, low birth weight, and attending center-based care before kindergarten; family's characteristics: mother married at birth, having siblings present, number of family members under age 18 at home, family's socioeconomic status, and living in single-parent family; and parental educational practices and home environment: parental educational expectations, parental participating in school events, home learning activities, and region and location of residence.

* $p<.05 . \quad{ }^{* *} p<.01 . \quad{ }^{* * *} p<.001$.


## Appendix Table 1. Definitions of Variables Used in Analyses

| Constructs and variables | Definitions | Values | Cronbach Alpha |
| :---: | :---: | :---: | :---: |
| Child Characteristic, Fall of Kindergarten |  |  |  |
| Gender | Dummy variable. | 1=boy; 0=girl |  |
| Low birth weight | Dummy variable for birth weight < 2500 grams. | $1=y e s ; 0=n o$ |  |
| Attended center care the year before entering kindergarten | Dummy variable if the child ever attended centerbased care. | $1=$ yes; 0=no |  |
| Family characteristics as reported by parents |  |  |  |
| Mothers married at birth | Dummy variable. | 1=yes; 0=no |  |
| Residing in single-mother family, available all interview points | Dummy variable. | $1=y e s ; 0=n o$ |  |
| Having siblings, available all interview points | Dummy variable. | 1=yes; 0=no |  |
| Number of persons age <18 in the household, available all interview points | Ordinal variable. | Ranges from 1-11 |  |
| Family SES scores, available all interview points | Continuous variable. Socioeconomic status was computed at the household level using father/male guardian's education, mother/female guardian's education, father/male guardian's occupation, mother/female guardian's occupation, and household income. | Ranges from -4.75 to 2.88 . |  |
| Parental educational practices and home environment |  |  |  |
| Parental educational expectations for child, available all interview points | Ordinal variable. Responses range from 1 (less than a high school diploma) to 6 (Ph.D., MD, or other higher degree). | Ranges from 1 (less than a high school diploma) to 6 (Ph.D., MD, or other higher degree) |  |
| Participation in school events, spring of | Ordinal variable. Sum of 7 dummy variables ( $1=y e s$; | Ranges from 0 to 7. | Kindergarten: . 58 |
| kindergarten, first grade, third grade, and fifth | $0=n o)$ for attending events such as PTA meetings, |  | First-grade: . 60 |
| grade | parent advisory meetings, volunteering at school, and |  | Third-grade: . 60 |
|  |  |  | Fifth-grade: . 60 |
| Region of residence, available all interview points | 4 dummy variables indicating Northeast, Middle West, South, and West. | $1=y \mathrm{es} ; 0=$ no |  |
| Place of residence, available all interview points | 3 dummy variables indicating city, suburban, and rural | 1=yes; 0=no |  |

Home learning activities, available all interview points

Fall of kindergarten: Continuous variable
Standardized score of 14 items including activities such as "learning activities in the home (e.g., reading books to child)" with 1 (everyday) and 0 otherwise, "number of children's books in the home" with 1 (10 or more books) and 0 (fewer than 10 books), and "child looks at picture books outside of school" with 1 (at least once or twice a week) and 0 (never). Spring of kindergarten: Continuous variable. Standardized score of 12 items including activities such as "family members bring child to the library, concerts, the museum, the zoo, and to sporting events" with 1 (yes) and 0 (no), "child looks at picture books outside of school" with 1 (at least once or twice a week) and 0 (never), and "frequency of using the computer" with 1 (at least once or twice a week) and 0 (never).

Spring of first grade: Continuous variable. Standardized score of 18 items including activities such as "learning activities in the home (e.g., reading books to child)" with 1 (everyday) and 0 otherwise, "telling stories, building things, teaching about nature, playing sports, doing art, doing chores, singing songs, playing games, practicing numbers" with responses 1 (at least 3 times a week) and 0 (less than 3 times a week), and "frequency of using the computer" with 1 (at least once or twice a week) and 0 (never).

Spring of third and fifth grades: Continuous variable. Standardized score of 25 items with 18 items the same as those in the spring of first grade, in addition to items such as "have gone to a play, concert, or show," "have visited a museum," and "have attended sporting events" with 1 (yes) and 0 (no).

First-grade: . 65
Ranges from Third-grade: . 74
Third grade: -1.74 to $1.09 \quad$ Fifth-grade: .74

## School characteristics

| Public school | Dummy variable. | 1=public school; <br> 0=private school |  |
| :---: | :---: | :---: | :---: |
| Student composition, spring semester of kindergarten, and first-, third, and fifth-grade | Continuous variable. Standardized score of 9 items | Ranges from 0 to 100 | Kindergarten: . 80 |
|  | including "percentage of minority students at school," |  | First-grade: . 76 |
|  | "percentage of LEP students at school," "percentage |  | Third-grade: . 88 |
|  | receiving Federal free lunch program," and |  | Fifth-grade: . 72 |
|  | "percentage of students in low-income families." The |  |  |
|  | higher the score, the more diversity the student composition. |  |  |
| School provides instructional ESL, available all interview points | Continuous variable. Standardized score of 9 variables, | For "frequency of ESL | Fall Kindergarten: . 73 |
|  | including 1) frequency of ESL instruction, 2) time spent | instruction" | Spring Kindergarten: . 74 |
|  | on ESL if receiving ESL, 3) percentage of students | $0=$ never | First-grade: . 82 |
|  | getting no ESL instruction, getting ESL outside, or | 1=less than once a week | Third-grade: . 83 |
|  | getting inside the regular classroom in the classroom | 2=1-2 times a week | Fifth-grade: . 77 |
|  | setting (3 variables), 4) if receiving pull-out or within | 3=3-4 times a week |  |
|  | regular classroom ESL instruction at the school setting | 4=daily |  |
|  | (2 variables), 5) if school provides Title I ESL/Bilingual | For "time spent on ESL" |  |
|  | program, and 6) percentage of teachers/aids are | 1=1-30 minutes a day |  |
|  | ESL/Bilingual among all faculty. | $2=31-60$ minutes a day |  |
|  |  | $3=61-90$ minutes a day |  |
|  | The higher the score, the more ESL/Bilingual | 4=more than 90 minutes a day |  |
|  | instructions provided. | Ranges from |  |

Title I services to eligible children/families, spring semester of kindergarten, first grade, and third grade

Teachers and administrators' ESL/Bilingual experience, available all interview points

Services/programs to ESL families, spring semester of kindergarten, first grade, and third grade

Continuous variable. Sum of 6 (7) dummy variables for kindergarten and first grade (third grade and fifth grade) including "serve targeted children in pull-out setting," "serve targeted children in an in-class setting," "extended learning time opportunity before and/or after school for targeted children," "improve the entire educational program through a school-wide program," "provide professional development activities," "provide family literacy services," and "other Title I services." Additional item, "reduce class size," was also collected for third- and fifth-grade. The higher the score, the more services the school provides to eligible children/families.
Continuous variable. Standardized score of 6 variables including asking the teacher whether or not $s /$ he has ESL certificate, years taught ESL program, years taught Bilingual program, and number of college courses in ESL, and asking the administrator the number of years teaching ESL program, the number of years teaching Bilingual program, and the number of ESL courses taken.
The higher the score, the more experienced the teacher and the administrator are regarding
ESL/Bilingual.
Continuous variable. Sum of 6 dummy variables including "translators are available to parents," "translations of written communications are provided," "Home visits," "outreach workers help enroll children," "conducting meetings in non-English language," and "other helpful services." The higher the score, the more services the school provides to ESL families.

For each variable:
1=yes; 0=no

Range from 0 to 6 for
kindergarten and first grade

Range from 0 to 7 for first- and third-grade

Ranges from
Fall Kindergarten: . 64
Spring Kindergarten: . 63
First-grade: . 71
Third-grade: . 65
Fifth-grade: . 65

School academic standards too low

School stability, spring semester of kindergarten, first-, third-, and fifth-grade

Student learning environment, spring semester of kindergarten, first grade, and third grade, observed by field interviewers

Average student academic performance, spring semester of kindergarten, and first-, third-, and fifth-grade

Ordinal variable.

Continuous variables. Standardized score of 3 ordina variables asking school administrators about if the school had problems with teacher absenteeism, teacher turnover, and child absenteeism. The higher the score, the more stable of the school environment. Continuous variable. Standardized score of 6 items observed by field researchers including "decorated hallways," "attentive teachers," "personable principal," "helpful staff in school," "order in hallways," and "order in classrooms." The higher the score, the better the learning environment.
Continuous variable. Standardized score of 2 items including "percent of school students having reading and verbal skills at or above grade level nationally" and "percent of school students having math or quantitative skills at or above grade level nationally." The higher the score, the higher the academic performance.

| 1=strongly disagree <br> 2=disagree <br> 3=neither agree nor disagree <br> 4=agree |  |
| :--- | :--- |
| 5=strongly agree |  |
| 1=strongly agree |  |
| 2=agree | Spring Kindergarten: .64 |
| 3=neither agree nor disagree | First-grade: .62 |
| 4=disagree | Fifth-grade: .65 .63 |
| 5=strongly disagree |  |
| 1=strongly disagree | Kindergarten: .80 |
| 2=disagree | First-grade: .84 |
| 3=neither agree nor disagree | Third-grade: .81 |
| 4=agree |  |
| 5=strongly agree |  |
| Ranges from -5.31 to 0.62 | Kindergarten: .97 |
| Ranges from -2.96 to 1.47 | First-grade: .97 |
|  | Third-grade: .97 |
|  | Fifth-grade: .95 |

Teacher's effort, spring semester of kindergarten, first-, third-, and fifth-grade

School support and teaching environment reported by teachers, fall and spring kindergarten, and spring semester of first-, third-, and fifth-grade

School work climate reported by school administrator, spring semester of kindergarten, and first-, third-, and fifth-grade

Continuous variable. Standardized score of 6 ordinal variables asking the teacher 1) during the school year, how many times did the teacher sent home letters/newsletters/other notices to parents, shared portfolios or other collections of children's work for parents to see, frequency of meeting with others teachers to discuss less planning, frequency of meeting with other teachers to discuss curriculum development, meeting with other teachers or specialists to discuss individual children, and meeting with the special education teacher or service providers to discuss and plan for the children with disabilities in the class.
Continuous variable. Standardized score of 12 items including: staff has school spirit, child misbehavior affects teaching, children incapable of learning, staff accepts me as colleague, staff learn/seek new ideas, paperwork interferes with teaching, parents support school staff, faculty on mission, school administrator communicates vision, school administrator deals with outside pressure effectively, school administrators prioritizes well, and school administrator encourages staff.
The higher the score, the higher the school supportive and teaching environment.
Continuous variable. Standardized score of 6 items including: school-based management committee is helpful, teacher union and school administrator work together, parents active in programs, strong community support, consensus on expectations, and order and discipline maintained. The higher the score the better the school environment.

For each ordinal variable 1=never
2=once a month or less
3=two or three times a month
4=once or twice a week
$5=$ three of four times a week 6=daily

Response for each variable: 1=strongly disagree
2=disagree
3=neither agree nor disagree
4=agree
5=strongly agree

Ranges from -3.04 to 1.18

Response for each item:
1=strongly disagree
2=disagree
3=neither agree nor disagree
4=agree
5=strongly agree

Ranges from -3.44 to 1.14

Fall kindergarten: . 85 Spring kindergarten: . 86
Spring first-grade: . 84
Spring third-grade: . 86 Spring fifth-grade: . 92

Kindergarten: . 69
First-grade: . 70
Third-grade: . 68
Fifth grade: . 73

School physical resources, spring of
kindergarten and first-grade, observed by field interviewers

Continuous variable. Standardized score of 10 items For each variable:
asking the school administrator if the following school $1=y e s ; 0=n o$ facilities meet needs: cafeteria, computer lab, library, art room, gymnasium, music room, playground, classrooms, auditorium, and multi-use room. The higher the score, the more school facility meet needs.

Kindergarten: . 70
First grade: . 79
Third grade: . 70
Fifth grade: . 71

Appendix Table 2. Sample Characteristics by Language Group
A. Native-Born Non-Hispanic White

|  | English Monolingua | English-Dominant Bilingual | Fluent Bilingual | Total ( $\mathrm{n}=11063$ ) |
| :---: | :---: | :---: | :---: | :---: |
| Child Characteristics |  |  |  |  |
| Boy (\%) | 51.68 | 41.45 | 56.67 | 51.59 |
| Low birth weight (<2500 g) (\%) | 8.62 | 8.55 | 10.00 | 8.67 |
| Center-based care before entering kindergarten (\%) | 83.58 | 85.71 | 81.67 | 83.59 |
| Family Characteristics |  |  |  |  |
| Mother married at birth (\%) | 81.46 | 80.54 | 86.67 | 81.50 |
| Residing in single-parent family (\%), Spring Fifth | 9.16 | 12.50 | 13.33 | 9.19 |
| Having siblings (\%), Spring Fifth *** | 46.34 | 46.68 | 56.67 | 46.22 |
| Number of persons age <18 in the household, Spring Fifth | 2.36 (1.04) | 2.50 (1.39) | 2.63 (1.06) | 2.36 (1.05) |
| Social economic status (SES) score, Spring Fifth | 0.21 (0.73) | 0.20 (0.84) | 0.27 (0.72) | 0.21 (0.73) |
| Parental Educational Practices and Home Environment |  |  |  |  |
| Educational expectation, Spring Fifth ** | 3.94 (0.98) | 4.20 (0.88) | 4.23 (1.00) | 3.95 (0.98) |
| Participating in school events, Spring Fifth | 0.11 (0.51) | 0.12 (0.51) | 0.16 (0.51) | 0.11 (0.51) |
| Home learning activities, Spring Fifth ** | 0.03 (0.47) | 0.13 (0.46) | 0.25 (0.39) | 0.04 (0.47) |
| Region of Residence |  |  |  |  |
| Northeast (\%), Spring Fifth | 21..71 | 21.18 | 35.29 | 21.77 |
| Middle West (\%), Spring Fifth | 34.17 | 30.59 | 26.47 | 34.08 |
| South (\%), Spring Fifth | 31.21 | 29.41 | 17.65 | 31.11 |
| West (\%), Spring Fifth | 12.91 | 18.82 | 20.59 | 13.03 |
| City (\%), Spring Fifth | 23.05 | 32.94 | 26.47 | 23.21 |
| Suburban (\%), Spring Fifth | 41.42 | 37.65 | 55.88 | 41.45 |
| Rural (\%), Spring Fifth * | 35.53 | 29.41 | 17.65 | 35.34 |
| School-Level Factors at Spring Fifth Grade |  |  |  |  |
| Public school (\%) | 74.24 | 66.29 | 76.32 | 74.14 |
| Minority student composition | -0.30 (0.38) | -0.31 (0.42) | -0.22 (0.49) | -0.30 (0.38) |
| Providing instructional ESL *** | -0.54 (0.39) | -0.50 (0.48) | -0.50 (0.38) | -0.54 (0.39) |
| Providing Title I related services | 1.06 (1.90) | 1.24 (2.11) | 1.37 (2.14) | 1.07 (1.90) |
| Teachers and principle ESL experiences *** | 0.22 (0.64) | 0.20 (0.63) | 0.18 (0.64) | 0.22 (0.64) |
| Providing any services/programs to ESL families * | 0.69 (1.36) | 0.60 (1.36) | 0.98 (1.62) | 0.68 (1.36) |
| Academic standards too low reported by teachers | 4.22 (0.78) | 4.10 (0.84) | 4.32 (0.68) | 4.21 (0.78) |
| School stability reported by school administrators | 0.12 (0.70) | 0.13 (0.65) | 0.28 (0.62) | 0.12 (0.70) |


| Student learning environment | $0.10(0.60)$ | $-0.02(0.73)$ | $0.11(0.56)$ |
| :--- | :--- | :--- | :--- |
| Student average academic performance | $0.27(0.81)$ | $0.31(0.80)$ | $0.27(0.92)$ |
| Teacher effort | $2.22(0.86)$ | $2.15(0.86)$ | $2.45(0.70)$ |
| School supportive and teaching environments | $0.08(0.50)$ | $0.02(0.51)$ | $0.22(0.85)$ |
| School work climate | $0.12(0.69)$ | $0.14(0.70)$ | $0.18(0.50)$ |
| School physical facility/resources | $0.08(0.50)$ | $0.02(0.55)$ | $0.09(0.72)$ |
| Percent of sample (\%) | 98.08 | $0.12(0.69)$ | $0.07(0.46)$ |

Note. Standard deviations are in parentheses. See Appendix Table 1 for detailed definitions of sample characteristics.

Appendix Table 2, cont.
B. Latino Origins and Native-Born Hispanic

|  | English Monolingual | English- <br> Dominant Bilingual | Fluent Bilingual | Non-EnglishDominant Bilingual | Non-English Monolingual | $\begin{gathered} \text { Total } \\ (n=3790) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Child Characteristics |  |  |  |  |  |  |
| Boy (\%) ** | 51.99 | 52.85 | 51.85 | 51.27 | 45.21 | 51.03 |
| Low birth weight (<2500 g) (\%) *** | 8.21 | 15.02 | 10.68 | 12.18 | 9.33 | 10.82 |
| Center-based care before entering kindergarten (\%) *** | 78.21 | 79.53 | 72.80 | 54.55 | 55.84 | 71.18 |
| Family Characteristics |  |  |  |  |  |  |
| Mother married at birth (\%) ** | 59.01 | 58.72 | 67.26 | 55.62 | 62.99 | 61.22 |
| Residing in single-parent family (\%), Spring Fifth *** | 13.18 | 15.99 | 16.95 | 10.66 | 10.49 | 13.25 |
| Having siblings (\%), Spring Fifth *** | 42.69 | 42.42 | 62.96 | 40.10 | 55.18 | 47.89 |
| \# of persons age <18 in the household, Spring Fifth *** | 2.42 (1.02) | 2.52 (1.09) | 2.60 (1.14) | 2.54 (1.11) | 2.90 (1.22) | 2.62 (1.22) |
| Social economic status (SES) score, Spring Fifth *** | -0.13 (0.69) | -0.23 (0.72) | -0.38(0.75) | -0.87 (0.43) | -0.94 (0.49) | -0.44 (0.73) |
| Parental Educational Practices and Home Environment |  |  |  |  |  |  |
| Educational expectation, Spring Fifth ** | 3.98 (1.04) | 4.14 (1.10) | 4.27 (1.12) | 4.13 (1.18) | 4.14 (1.17) | 4.12 (1.12) |
| Participating in school events, Spring Fifth *** | 0.02 (0.58) | -0.08 (0.60) | -0.10 (0.57) | -0.23 (0.56) | -0.34 (0.62) | -0.13 (0.60) |
| Home learning activities, Spring Fifth *** | 0.01 (0.50) | -0.01 (0.52) | 0.01 (0.56) | -0.15 (0.62) | -0.24 (0.64) | -0.06 (0.57) |
| Region of Residence |  |  |  |  |  |  |
| Northeast (\%), Spring Fifth *** | 15.11 | 17.41 | 18.96 | 15.79 | 6.35 | 14.12 |
| Middle West (\%), Spring Fifth *** | 16.87 | 12.93 | 10.44 | 5.26 | 5.69 | 11.01 |
| South (\%), Spring Fifth ** | 22.85 | 31.13 | 31.91 | 22.11 | 31.51 | 28.66 |
| West (\%), Spring Fifth *** | 45.17 | 38.52 | 38.68 | 56.84 | 56.46 | 46.21 |
| City (\%), Spring Fifth *** | 43.64 | 47.61 | 51.65 | 63.16 | 67.70 | 53.03 |
| Suburban (\%), Spring Fifth *** | 41.34 | 42.29 | 42.52 | 32.63 | 27.88 | 38.21 |
| Rural (\%), Spring Fifth *** | 15.02 | 10.11 | 5.83 | 4.21 | 4.42 | 8.76 |
| School-Level Factors at Spring Fifth Grade |  |  |  |  |  |  |
| Public school (\%) *** | 79.53 | 80.40 | 83.03 | 91.00 | 93.53 | 84.74 |
| Minority student composition ${ }^{* * *}$ | 0.13 (0.70) | 0.23 (0.76) | 0.37 (0.74) | 0.76 (0.86) | 0.90 (0.76) | 0.44 (0.80) |
| Providing instructional ESL ${ }^{* * *}$ | -0.03 (0.57) | 0.06 (0.71) | 0.30 (0.91) | 1.09 (1.17) | 1.42 (1.52) | 0.47 (1.16) |
| Providing Title I related services *** | 1.49 (2.18) | 1.62 (2.23) | 2.09 (2.44) | 1.89 (2.370 | 2.43 (2.54) | 1.87 (2.37) |
| Teachers and principle ESL experiences *** | 0.40 (0.68) | 0.44 (0.72) | 0.30 (0.75) | 0.59 (0.68) | 0.61 (0.81) | 0.47 (0.74) |
| Providing any services/programs to ESL families *** | 1.10 (1.67) | 1.14 (1.70) | 1.72 (1.89) | 1.43 (1.91) | 1.85 (2.00) | 1.40 (1.84) |
| Academic standard too low reported by teachers *** | 4.18 (0.81) | 4.12 (0.82) | 4.10 (0.84) | 4.00 (0.90) | 3.97 (0.90) | 4.08 (0.85) |
| School stability reported by school administrators *** | -0.07 (0.77) | -0.13 (0.76) | -0.16 (0.79) | -0.35 (0.87) | -0.36 (0.78) | -0.18 (0.79) |


| Student learning environment $* * *$ | $-0.12(0.76)$ | $-0.08(0.81)$ | $-0.20(0.81)$ | $-0.28(0.79)$ |
| :--- | :--- | :--- | :--- | :--- |
| Student average academic performance $* * *$ | $-0.05(0.94)$ | $-0.23(1.01)$ | $-0.43(1.06)$ | $-0.88(1.05)$ |
| Teacher effort $* * *$ | $2.20(0.87)$ | $2.09(0.80)$ | $2.00(0.80)$ | $1.98(0.77)$ |
| Supportive and teaching environments $* * *$ | $-0.01(0.59)$ | $-0.06(0.59)$ | $-0.05(0.61)$ | $-0.16(0.61)$ |
| School work climate $* *$ | $-0.04(0.67)$ | $-0.04(0.64)$ | $-0.09(0.69)$ | $-0.15(0.68)$ |
| School physical facility/resources $* * *$ | $-0.08(0.51)$ | $-0.08(0.54)$ | $-0.15(0.54)$ | $-0.34(0.55)$ |
| Percent of sample (\%) | $-0.20(0.60)$ | $-0.19(0.66)$ | $-0.08(0.60)$ | $-0.26(0.58)$ |

Note. Standard deviations are in parentheses. See Appendix Table 1 for detailed definitions of sample characteristics.

## Appendix Table 2, cont.

C. Asian Origins and Native-Born Asian

|  | English Monolingual |  | Fluent Bilingual | Non-EnglishDominant Bilingual | Non-English Monolingual | $\begin{gathered} \hline \text { Total } \\ (n=1523) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Child Characteristics |  |  |  |  |  |  |
| Boy (\%) | 51.55 | 44.69 | 50.69 | 54.35 | 51.78 | 50.56 |
| Low birth weight (<2500 g) (\%) | 9.30 | 15.76 | 12.04 | 14.13 | 8.63 | 11.95 |
| Center-based care before entering kindergarten (\%) | 80.06 | 76.65 | 79.04 | 64.29 | 74.05 | 77.60 |
| Family Characteristics |  |  |  |  |  |  |
| Mother married at birth (\%) | 81.36 | 82.78 | 87.63 | 86.57 | 83.70 | 84.55 |
| Residing in single-parent family (\%), Spring Fifth | 5.63 | 9.00 | 6.48 | 8.70 | 5.08 | 6.50 |
| Having siblings (\%), Spring Fifth *** | 57.46 | 50.16 | 55.79 | 39.13 | 36.55 | 48.59 |
| \# of persons age <18 in the household, Spring Fifth *** | 2.42 (1.35) | 2.38 (1.68) | 2.49 (1.47) | 2.82 (1.48) | 3.69 (1.89) | 2.62 (1.68) |
| Social economic status (SES) score, Spring Fifth *** | 0.49 (0.82) | 0.16 (0.80) | 0.03 (0.88) | -0.35 (0.86) | -0.53 (0.67) | 0.10 (0.88) |
| Parental Educational Practices and Home Environment |  |  |  |  |  |  |
| Educational expectation, Spring Fifth ** | 4.37 (1.02) | 4.39 (0.96) | 4.64 (1.10) | 4.24 (1.03) | 4.22 (1.20) | 4.43 (1.07) |
| Participating in school events, Spring Fifth *** | 0.04 (0.54) | -0.04 (0.56) | -0.22 (0.58) | -0.36 (0.64) | -0.42 (0.60) | -0.14 (0.60) |
| Home learning activities, Spring Fifth *** | 0.10 (0.51) | 0.14 (0.50) | 0.16 (0.50) | -0.07 (0.57) | -0.10 (0.61) | 0.10 (0.52) |
| Region of Residence |  |  |  |  |  |  |
| Northeast (\%), Spring Fifth | 8.51 | 11.46 | 14.71 | 7.94 | 8.42 | 11.52 |
| Middle West (\%), Spring Fifth *** | 14.04 | 11.46 | 19.61 | 23.81 | 40.00 | 19.16 |
| South (\%), Spring Fifth * | 16.17 | 19.79 | 17.65 | 14.29 | 4.21 | 15.93 |
| West (\%), Spring Fifth ** | 61.28 | 57.29 | 48.04 | 53.97 | 47.37 | 53.39 |
| City (\%), Spring Fifth *** | 32.91 | 36.02 | 44.70 | 55.56 | 64.21 | 43.36 |
| Suburban (\%), Spring Fifth ** | 39.32 | 42.47 | 42.72 | 39.68 | 22.11 | 38.89 |
| Rural (\%), Spring Fifth *** | 27.78 | 21.51 | 12.58 | 4.76 | 13.68 | 17.76 |
| School-Level Factors at Spring Fifth Grade |  |  |  |  |  |  |
| Public school (\%) ${ }^{* * *}$ | 75.20 | 76.50 | 82.02 | 90.48 | 93.88 | 81.43 |
| Minority student composition *** | 0.17 (0.76) | 0.36 (0.87) | 0.44 (0.91) | 0.72 (0.92) | 0.82 (0.89) | 0.42 (0.89) |
| Providing instructional ESL *** | -0.06 (0.42) | 0.10 (0.84) | 0.30 (0.95) | 0.54 (1.10) | 0.81 (1.11) | 0.24 (0.88) |
| Providing Title I related services *** | 1.33 (2.24) | 1.37 (2.24) | 1.70 (2.36) | 1.84 (2.52) | 1.64 (2.41) | 1.45 (2.28) |
| Teachers and principle ESL experiences *** | 0.21 (0.65) | 0.30 (0.66) | 0.21 (0.64) | 0.42 (0.76) | 0.45 (0.61) | 0.32 (0.66) |
| Providing any services/programs to ESL families *** | 1.31 (1.79) | 1.31 (1.73) | 1.68 (1.80) | 1.35 (1.75) | 1.61 (1.98) | 1.40 (1.80) |
| Academic standard too low reported by teachers | 4.24 (0.73) | 4.18 (0.82) | 4.28 (0.77) | 4.19 (0.77) | 4.28 (0.73) | 4.24 (0.76) |
| School stability reported by school administrators *** | 0.21 (0.62) | 0.10 (0.68) | 0.09 (0.69) | -0.20 (1.03) | -0.08 (0.75) | 0.09 (0.71) |


| Student learning environment | -0.12 (0.69) | -0.17 (0.79) | -0.05 (0.76) | -0.16 (0.68) | -0.26 (1.02) | -0.12 (0.78) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Student average academic performance *** | 0.12 (0.96) | -0.05 (1.03) | -0.03 (0.99) | -0.35 (1.06) | -0.54 (1.00) | -0.07 (1.02) |
| Teacher effort | 2.08 (0.79) | 2.06 (0.91) | 2.06 (0.88) | 2.00 (0.79) | 2.16 (0.70) | 2.08 (0.84) |
| School supportive and teaching environments ** | 0.11 (0.49) | 0.08 (0.50) | 0.04 (0.52) | -0.17 (0.71) | -0.01 (0.54) | 0.05 (0.53) |
| School work climate | 0.15 (0.73) | 0.07 (0.69) | 0.01 (0.72) | -0.05 (0.61) | -0.05 (0.60) | 0.05 (0.70) |
| School physical facility/resources | -0.16 (0.53) | -0.21 (0.56) | -0.13 (0.56) | -0.00 (0.46) | -0.15 (0.52) | -0.14 (0.54) |
| Percent of sample (\%) | 23.31 | 20.42 | 28.37 | 6.04 | 12.93 | 100 |

Note. Standard deviations are in parentheses. See Appendix Table 1 for detailed definitions of sample characteristics.

Appendix Table 3. Reading Scores by Language Group from Kindergarten to Fifth Grade

|  | Fall K | Spring K | Spring First | Spring Third | Spring Fifth | Points (\%) change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Native-Born Non-Hispanic White |  |  |  |  |  |  |
| English Monolingual ( $\mathrm{n}=10851$ ) | 51.60 (9.39) | 52.43 (9.08) | 51.94 (8.99) | 52.41 (9.16) | 52.27 (9.24) | 0.67 (1.30\%) |
| English-Dominant Bilingual ( $\mathrm{n}=152$ ) | 51.04 (9.27) | 51.26 (8.54) | 50.28 (8.79) | 51.98 (8.82) | 51.76 (9.17) | 0.72 (1.41\%) |
| Fluent Bilingual ( $\mathrm{n}=60$ ) | 50.90 (9.22) | 51.55 (8.59) | 51.18 (9.92) | 53.54 (9.56) | 52.61 (9.36) | 1.71 (3.36\%) |
| Total ( $\mathrm{n}=11063$ ) | 51.58 (9.39) | 52.40 (9.07) | 51.89 (9.00) | 52.38 (9.17) | 52.24 (9.25) | 0.66 (1.28\%) |
| Latino Origins including Native-Born Hispanic |  |  |  |  |  |  |
| English Monolingual ( $\mathrm{n}=1108$ ) | 48.11 (9.71) | 49.94 (9.27) | 49.46 (9.12) | 49.85 (9.25) | 49.62 (9.09) | 1.51 (3.14\%) |
| English-Dominant Bilingual ( $\mathrm{n}=719$ ) | 46.42 (9.69) | 48.25 (9.51) | 48.39 (9.61) | 48.30 (9.62) | 48.24 (9.30) | 1.82 (3.92\%) |
| Fluent Bilingual ( $\mathrm{n}=702$ ) | 46.42 (9.40) | 48.34 (9.52) | 48.40 (8.86) | 48.62 (8.93) | 48.51 (8.82) | 2.09 (4.50\%) |
| Non-English-Dominant Bilingual ( $\mathrm{n}=197$ ) | 43.32 (8.91) | 44.89 (9.32) | 43.87 (9.70) | 43.95 (9.10) | 43.80 (8.43) | 0.48 (1.11\%) |
| Non-English Monolingual ( $\mathrm{n}=772$ ) | 41.42 (8.54) | 42.91 (8.87) | 43.44 (9.13) | 41.95 (9.30) | 42.72 (8.51) | 1.30 (3.14\%) |
| Total ( $\mathrm{n}=3790$ ) | 45.46 (9.65) | 47.23 (9.64) | 47.13 (9.50) | 46.96 (9.72) | 47.04 (9.28) | 1.58 (3.48\%) |
| Asian Origins including Native-Born Asian |  |  |  |  |  |  |
| English Monolingual ( $\mathrm{n}=355$ ) | 53.70 (10.87) | 54.90 (9.52) | 54.48 (8.92) | 53.62 (8.89) | 53.61 (8.95) | -0.09 (-0.17\%) |
| English-Dominant Bilingual ( $\mathrm{n}=311$ ) | 51.66 (11.06) | 53.37 (10.49) | 52.79 (9.40) | 52.12 (8.99) | 52.29 (9.75) | 0.63 (1.22\%) |
| Fluent Bilingual ( $\mathrm{n}=432$ ) | 51.79 (11.15) | 53.95 (10.59) | 53.93 (9.29) | 52.66 (8.44) | 52.49 (8.78) | 0.70 (1.35\%) |
| Non-English-Dominant Bilingual ( $\mathrm{n}=92$ ) | 44.93 (10.18) | 48.54 (9.07) | 47.00 (11.24) | 45.23 (9.50) | 45.93 (8.76) | 1.00 (2.22\%) |
| Non-English Monolingual ( $\mathrm{n}=197$ ) | 44.36 (9.83) | 47.16 (10.06) | 46.57 (9.20) | 45.54 (9.46) | 45.50 (9.39) | 1.14 (2.57\%) |
| Total ( $\mathrm{n}=1523$ ) | 50.41 (11.25) | 52.52 (10.44) | 51.93 (9.83) | 50.89 (9.41) | 50.95 (9.63) | 0.54 (1.07\%) |

Appendix Table 4. Math Scores by Language Group from Kindergarten to Fifth Grade

|  | Fall K | Spring K | Spring First | Spring Third | Spring Fifth |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |

Appendix Table 5. Approaches To Learning Raw Scores by Language Group from Kindergarten to Fifth Grade

|  | Fall K | Spring K | Spring First | Spring Third | Spring Fifth |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |

Appendix Table 6. Self-Control Raw Scores by Language Group from Kindergarten to Fifth Grade

|  | Fall K | Spring K | Spring First | Spring Third | Spring Fifth | Points (\%) change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Native-Born Non-Hispanic White |  |  |  |  |  |  |
| English Monolingual ( $\mathrm{n}=10851$ ) | 3.12 (0.61) | 3.21 (0.61) | 3.19 (0.60) | 3.20 (0.60) | 3.20 (0.59) | 0.08 (2.56) |
| English-Dominant Bilingual ( $\mathrm{n}=152$ ) | 3.08 (0.62) | 3.19 (0.63) | 3.12 (0.61) | 3.24 (0.62) | 3.21 (0.58) | 0.13 (4.22) |
| Fluent Bilingual ( $\mathrm{n}=60$ ) | 3.22 (0.58) | 3.11 (0.64) | 3.13 (0.57) | 3.16 (0.56) | 3.27 (0.61) | 0.05 (1.55) |
| Total ( $\mathrm{n}=11063$ ) | 3.12 (0.61) | 3.21 (0.61) | 3.19 (0.60) | 3.20 (0.60) | 3.20 (0.59) | 0.08 (2.56) |
| Latino Origins including Native-Born Hispanic |  |  |  |  |  |  |
| English Monolingual ( $\mathrm{n}=1108$ ) | 3.06 (0.59) | 3.15 (0.63) | 3.11 (0.63) | 3.14 (0.60) | 3.14 (0.62) | 0.08 (2.61) |
| English-Dominant Bilingual ( $\mathrm{n}=719$ ) | 3.02 (0.60) | 3.11 (0.60) | 3.08 (0.62) | 3.13 (0.61) | 3.10 (0.60) | 0.08 (2.65) |
| Fluent Bilingual ( $\mathrm{n}=702$ ) | 2.99 (0.63) | 3.05 (0.61) | 3.08 (0.63) | 3.11 (0.58) | 3.20 (0.57) | 0.21 (7.02) |
| Non-English-Dominant Bilingual ( $\mathrm{n}=197$ ) | 2.95 (0.60) | 2.96 (0.61) | 3.03 (0.62) | 3.12 (0.58) | 3.13 (0.57) | 0.18 (6.10) |
| Non-English Monolingual ( $\mathrm{n}=772$ ) | 2.95 (0.63) | 3.04 (0.60) | 3.13 (0.53) | 2.98 (0.62) | 3.13 (0.64) | 0.18 (6.10) |
| Total ( $\mathrm{n}=3790$ ) | 3.02 (0.60) | 3.10 (0.62) | 3.09 (0.62) | 3.12 (0.60) | 3.13 (0.61) | 0.11 (3.64) |
| Asian Origins including Native-Born Asian |  |  |  |  |  |  |
| English Monolingual ( $\mathrm{n}=355$ ) | 3.19 (0.59) | 3.26 (0.59) | 3.23 (0.58) | 3.32 (0.57) | 3.36 (0.58) | 0.17 (5.33) |
| English-Dominant Bilingual ( $\mathrm{n}=311$ ) | 3.18 (0.58) | 3.26 (0.62) | 3.31 (0.56) | 3.34 (0.62) | 3.34 (0.57) | 0.16 (5.03) |
| Fluent Bilingual ( $\mathrm{n}=432$ ) | 3.12 (0.54) | 3.30 (0.53) | 3.30 (0.53) | 3.34 (0.60) | 3.37 (0.49) | 0.25 (8.01) |
| Non-English-Dominant Bilingual ( $\mathrm{n}=92$ ) | 3.02 (0.62) | 3.18 (0.69) | 3.22 (0.56) | 3.19 (0.62) | 3.32 (0.58) | 0.30 (9.93) |
| Non-English Monolingual ( $\mathrm{n}=197$ ) | 3.03 (0.55) | 3.27 (0.61) | 3.13 (0.56) | 3.26 (0.61) | 3.35 (0.66) | 0.32 (10.56) |
| Total ( $\mathrm{n}=1523$ ) | 3.12 (0.58) | 3.25 (0.61) | 3.26 (0.56) | 3.30 (0.60) | 3.35 (0.56) | 0.23 (7.37) |

Appendix Table 7. Interpersonal Raw Scores by Language Group from Kindergarten to Fifth Grade

|  | Fall K | Spring K | Spring First | Spring Third | Spring Fifth |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |

Appendix Table 8. Externalizing Problem Raw Scores by Language Group from Kindergarten to Fifth Grade

|  | Fall K | Spring K | Spring First | Spring Third | Spring Fifth |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |

Appendix Table 9. Internalizing Problem Raw Scores by Language Group from Kindergarten to Fifth Grade

|  | Fall K | Spring K | Spring First | Spring Third | Spring Fifth | Points (\%) change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Native-Born Non-Hispanic White |  |  |  |  |  |  |
| English Monolingual ( $\mathrm{n}=10851$ ) | 1.54 (0.52) | 1.56 (0.51) | 1.60 (0.51) | 1.65 (0.53) | 1.68 (0.54) | 0.14 (9.09) |
| English-Dominant Bilingual ( $\mathrm{n}=152$ ) | 1.56 (0.46) | 1.57 (0.48) | 1.70 (0.53) | 1.66 (0.52) | 1.72 (0.57) | 0.16 (10.26) |
| Fluent Bilingual ( $\mathrm{n}=60$ ) | 1.61 (0.50) | 1.74 (0.50) | 1.89 (0.63) | 1.67 (0.48) | 1.72 (0.60) | 0.11 (6.83) |
| Total ( $\mathrm{n}=11063$ ) | 1.54 (0.52) | 1.57 (0.51) | 1.61 (0.51) | 1.65 (0.53) | 1.68 (0.54) | 0.14 (9.09) |
| Latino Origins including Native-Born Hispanic |  |  |  |  |  |  |
| English Monolingual ( $\mathrm{n}=1108$ ) | 1.59 (0.54) | 1.62 (0.53) | 1.65 (0.53) | 1.66 (0.51) | 1.71 (0.55) | 0.12 (7.55) |
| English-Dominant Bilingual ( $\mathrm{n}=719$ ) | 1.58 (0.55) | 1.64 (0.50) | 1.66 (0.54) | 1.68 (0.53) | 1.72 (0.53) | 0.14 (8.86) |
| Fluent Bilingual ( $\mathrm{n}=702$ ) | 1.57 (0.55) | 1.67 (0.54) | 1.64 (0.55) | 1.67 (0.55) | 1.66 (0.50) | 0.09 (5.73) |
| Non-English-Dominant Bilingual ( $\mathrm{n}=197$ ) | 1.60 (0.53) | 1.66 (0.52) | 1.63 (0.47) | 1.68 (0.54) | 1.63 (0.54) | 0.03 (1.88) |
| Non-English Monolingual ( $\mathrm{n}=772$ ) | 1.68 (0.51) | 1.66 (0.47) | 1.66 (0.51) | 1.77 (0.50) | 1.75 (0.59) | 0.07 (4.17) |
| Total ( $\mathrm{n}=3790$ ) | 1.60 (0.54) | 1.64 (0.52) | 1.65 (0.52) | 1.68 (0.52) | 1.70 (0.54) | 0.10 (6.25) |
| Asian Origins including Native-Born Asian |  |  |  |  |  |  |
| English Monolingual ( $\mathrm{n}=355$ ) | 1.56 (0.49) | 1.53 (0.43) | 1.54 (0.40) | 1.54 (0.50) | 1.61 (0.45) | 0.05 (3.20) |
| English-Dominant Bilingual ( $\mathrm{n}=311$ ) | 1.42 (0.44) | 1.50 (0.46) | 1.51 (0.47) | 1.54 (0.44) | 1.58 (0.54) | 0.16 (11.27) |
| Fluent Bilingual ( $\mathrm{n}=432$ ) | 1.45 (0.45) | 1.46 (0.45) | 1.52 (0.47) | 1.50 (0.48) | 1.60 (0.52) | 0.15 (10.34) |
| Non-English-Dominant Bilingual ( $\mathrm{n}=92$ ) | 1.61 (0.55) | 1.63 (0.56) | 1.52 (0.50) | 1.56 (0.50) | 1.58 (0.49) | -0.03 (1.86) |
| Non-English Monolingual ( $\mathrm{n}=197$ ) | 1.61 (0.58) | 1.58 (0.47) | 1.78 (0.63) | 1.55 (0.53) | 1.66 (0.54) | 0.05 (3.01) |
| Total ( $\mathrm{n}=1523$ ) | 1.52 (0.50) | 1.53 (0.48) | 1.54 (0.48) | 1.53 (0.49) | 1.60 (0.50) | 0.08 (5.26) |

Appendix Table 10. Correlation Matrix for Analyzed School-Level Variables on Academic Outcomes

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reading |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Fall K |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Spring K | 0.80 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Spring First | 0.68 | 0.78 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Spring Third | 0.60 | 0.65 | 0.75 |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. Spring Fifth | 0.58 | 0.62 | 0.71 | 0.85 |  |  |  |  |  |  |  |  |  |  |  |
| Math |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. Fall K | 0.77 | 0.71 | 0.66 | 0.65 | 0.64 |  |  |  |  |  |  |  |  |  |  |
| 7. Spring K | 0.68 | 0.74 | 0.68 | 0.66 | 0.64 | 0.83 |  |  |  |  |  |  |  |  |  |
| 8. Spring First | 0.58 | 0.62 | 0.70 | 0.65 | 0.64 | 0.72 | 0.78 |  |  |  |  |  |  |  |  |
| 9. Spring Third | 0.56 | 0.59 | 0.64 | 0.73 | 0.71 | 0.71 | 0.75 | 0.79 |  |  |  |  |  |  |  |
| 10. Spring Fifth | 0.54 | 0.56 | 0.60 | 0.68 | 0.72 | 0.68 | 0.72 | 0.75 | 0.87 |  |  |  |  |  |  |
| School-level Factors at Fifth Grade |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11. Public school | -0.16 | -0.15 | -0.14 | -0.18 | -0.20 | -0.19 | -0.18 | -0.14 | -0.10 | -0.11 |  |  |  |  |  |
| 12. Minority student composition | -0.24 | -0.19 | -0.23 | -0.32 | -0.33 | -0.31 | -0.28 | -0.26 | -0.26 | -0.25 | 0.37 |  |  |  |  |
| 13. Providing instructional ESL | -0.15 | -0.16 | -0.23 | -0.30 | -0.27 | -0.28 | -0.26 | -0.22 | -0.23 | -0.22 | 0.17 | 0.42 |  |  |  |
| 14. Providing Title I services | -0.20 | -0.18 | -0.18 | -0.14 | -0.12 | -0.20 | -0.18 | -0.17 | -0.08 | -0.06 | 0.05 | 0.55 | 0.25 |  |  |
| 15. Teachers and principle ESL experiences | -0.12 | -0.11 | -0.13 | -0.13 | -0.14 | -0.14 | -0.13 | -0.12 | -0.11 | -0.15 | 0.04 | 0.32 | 0.31 | 0.08 |  |
| 16. Providing services to ESL families | -0.10 | -0.09 | -0.12 | -0.16 | -0.16 | -0.16 | -0.15 | -0.13 | -0.11 | -0.09 | 0.31 | 0.40 | 0.32 | 0.52 | 0.16 |
| 17. Academic standards low | 0.14 | 0.11 | 0.14 | 0.08 | 0.08 | 0.13 | 0.12 | 0.11 | 0.07 | 0.09 | -0.02 | -0.12 | -0.06 | -0.16 | -0.04 |
| 18. School stability | 0.11 | 0.10 | 0.10 | 0.14 | 0.17 | 0.11 | 0.10 | 0.09 | 0.11 | 0.15 | -0.08 | -0.26 | -0.11 | -0.25 | -0.09 |
| 19. Student learning environment | 0.08 | 0.07 | 0.09 | 0.14 | 0.14 | 0.13 | 0.12 | 0.11 | 0.12 | 0.11 | -0.10 | -0.17 | -0.12 | -0.09 | -0.10 |
| 20. Student average academic performance | 0.27 | 0.22 | 0.23 | 0.28 | 0.28 | 0.33 | 0.28 | 0.26 | 0.27 | 0.26 | -0.32 | -0.52 | -0.30 | -0.34 | -0.17 |
| 21. Teacher effort | -0.00 | -0.02 | -0.00 | 0.01 | 0.02 | 0.01 | -0.00 | 0.01 | 0.03 | 0.04 | 0.28 | -0.05 | -0.03 | 0.03 | -0.02 |
| 22. School supportive and teaching environments | 0.14 | 0.12 | 0.13 | 0.13 | 0.13 | 0.14 | 0.13 | 0.10 | 0.10 | 0.12 | -0.07 | -0.22 | -0.11 | -0.21 | -0.10 |
| 23. School work climate | 0.12 | 0.11 | 0.06 | 0.14 | 0.17 | 0.10 | 0.11 | 0.05 | 0.13 | 0.17 | -0.08 | -0.23 | -0.09 | -0.24 | -0.08 |
| 24. School physical facility/resources | 0.08 | 0.06 | 0.08 | 0.13 | 0.12 | 0.12 | 0.11 | 0.10 | 0.13 | 0.12 | 0.03 | -0.29 | -0.13 | -0.09 | -0.18 |

## Appendix Table 10. Cont.

|  | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 17. Academic standards low | -0.02 |  |  |  |  |  |  |
| 18. School stability | -0.19 | 0.12 |  |  |  |  |  |
| 19. Student learning environment | -0.06 | 0.08 | 0.14 |  |  |  |  |
| 20. Student average academic performance | -0.29 | 0.18 | 0.30 | 0.21 |  |  |  |
| 21. Teacher effort | 0.04 | 0.06 | 0.04 | 0.04 | 0.03 |  |  |
| 22. School supportive and teaching environments | -0.10 | 0.44 | 0.22 | 0.14 | 0.24 | 0.03 |  |
| 23. School work climate | -0.07 | 0.17 | 0.36 | 0.18 | 0.33 | 0.04 | 0.22 |
| 24. School physical facility/resources | -0.09 | 0.03 | 0.19 | 0.19 | 0.21 | 0.14 | 0.02 |
|  |  |  |  |  |  |  |  |

Note. Fall K = Fall Kindergarten; Spring K = Spring Kindergarten; Spring First = Spring First-grade; Spring Third = Spring Third-grade; Spring Fifth = Spring Fifth-grade.
Numbers in bold indicate the correlation coefficient is at least at $p<.05$.

Appendix Table 11. Correlation Matrix for Analyzed School-Level Variables on Social-Emotional Outcomes

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Approaches to Learning |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Fall K |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Spring K | 0.26 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Spring First | 0.30 | 0.25 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Spring Third | 0.24 | 0.18 | 0.30 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. Spring Fifth | 0.15 | 0.13 | 0.20 | 0.24 |  |  |  |  |  |  |  |  |  |  |  |  |
| Self-Control |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. Fall K | 0.28 | 0.07 | 0.06 | 0.06 | 0.04 |  |  |  |  |  |  |  |  |  |  |  |
| 7. Spring K | 0.19 | 0.80 | 0.15 | 0.15 | 0.09 | 0.17 |  |  |  |  |  |  |  |  |  |  |
| 8. Spring First | 0.13 | 0.11 | 0.51 | 0.16 | 0.09 | 0.04 | 0.09 |  |  |  |  |  |  |  |  |  |
| 9. Spring Third | 0.09 | 0.09 | 0.12 | 0.52 | 0.12 | 0.04 | 0.10 | 0.10 |  |  |  |  |  |  |  |  |
| 10. Spring Fifth | 0.07 | 0.10 | 0.09 | 0.15 | 0.64 | 0.04 | 0.08 | 0.09 | 0.10 |  |  |  |  |  |  |  |
| Interpersonal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11. Fall K | 0.32 | 0.09 | 0.08 | 0.07 | 0.04 | 0.39 | 0.14 | 0.05 | 0.02 | 0.03 |  |  |  |  |  |  |
| 12. Spring K | 0.19 | 0.76 | 0.15 | 0.13 | 0.10 | 0.12 | 0.74 | 0.08 | 0.09 | 0.09 | 0.21 |  |  |  |  |  |
| 13. Spring First | 0.13 | 0.11 | 0.50 | 0.16 | 0.09 | 0.02 | 0.09 | 0.45 | 0.10 | 0.06 | 0.07 | 0.11 |  |  |  |  |
| 14. Spring Third | 0.10 | 0.09 | 0.17 | 0.56 | 0.11 | 0.03 | 0.09 | 0.13 | 0.43 | 0.10 | 0.05 | 0.10 | 0.13 |  |  |  |
| 15. Spring Fifth | 0.09 | 0.08 | 0.12 | 0.14 | 0.57 | 0.04 | 0.07 | 0.09 | 0.09 | 0.52 | 0.05 | 0.07 | 0.10 | 0.10 |  |  |
| Externalizing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16. Fall K | 0.12 | -0.08 | -0.10 | -0.08 | -0.08 | 0.18 | -0.05 | -0.08 | -0.06 | -0.06 | 0.19 | -0.03 | -0.07 | -0.06 | -0.02 |  |
| 17. Spring K | -0.04 | 0.67 | -0.08 | -0.07 | -0.08 | 0.02 | 0.61 | -0.08 | -0.03 | -0.03 | 0.04 | 0.57 | -0.06 | -0.03 | -0.04 | 0.15 |
| 18. Spring First | -0.11 | -0.10 | 0.07 | -0.11 | -0.11 | -0.03 | -0.08 | 0.13 | -0.09 | -0.06 | -0.03 | -0.07 | 0.14 | -0.04 | -0.05 | 0.14 |
| 19. Spring Third | -0.08 | -0.06 | -0.09 | 0.30 | -0.08 | -0.02 | -0.02 | -0.05 | 0.30 | -0.04 | -0.01 | -0.02 | -0.06 | 0.24 | -0.01 | 0.11 |
| 20. Spring Fifth | -0.07 | -0.04 | -0.07 | -0.06 | 0.47 | -0.01 | -0.02 | -0.06 | -0.02 | 0.39 | -0.01 | -0.02 | -0.06 | -0.04 | 0.34 | 0.07 |
| Internalizing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21. Fall K | 0.18 | 0.00 | -0.03 | -0.02 | -0.03 | 0.18 | 0.04 | -0.02 | -0.02 | -0.01 | 0.25 | 0.04 | -0.01 | -0.02 | -0.01 | 0.33 |
| 22. Spring K | 0.01 | 0.66 | -0.02 | 0.01 | -0.00 | 0.06 | 0.63 | -0.02 | 0.01 | 0.03 | 0.07 | 0.58 | -0.02 | 0.01 | 0.01 | 0.04 |
| 23. Spring First | -0.03 | -0.04 | 0.17 | -0.02 | -0.03 | 0.04 | -0.00 | 0.19 | 0.00 | -0.01 | 0.02 | -0.00 | 0.22 | 0.02 | 0.00 | 0.03 |
| 24. Spring Third | -0.02 | -0.01 | -0.02 | 0.30 | -0.01 | -0.01 | 0.01 | 0.02 | 0.30 | 0.01 | 0.00 | 0.01 | -0.02 | 0.25 | 0.03 | 0.03 |
| 25. Spring Fifth | -0.04 | -0.00 | -0.04 | -0.02 | 0.42 | 0.01 | 0.00 | 0.01 | 0.00 | 0.40 | 0.01 | 0.01 | -0.01 | -0.02 | 0.39 | 0.02 |
| School-level Factors at Fifth Grade |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 26. Attending public school | -0.03 | -0.03 | -0.03 | -0.05 | -0.05 | 0.01 | -0.02 | 0.00 | 0.03 | -0.01 | -0.05 | -0.02 | -0.01 | -0.03 | -0.04 | -0.02 |
| 27. Minority student composition | -0.11 | -0.07 | -0.05 | -0.06 | -0.09 | -0.04 | -0.08 | -0.06 | -0.01 | -0.08 | -0.08 | -0.06 | -0.03 | -0.06 | -0.10 | -0.00 |
| 28. School provides instructional ESL | -0.05 | -0.04 | -0.02 | -0.03 | 0.04 | -0.04 | -0.03 | -0.03 | -0.03 | 0.06 | -0.06 | -0.04 | -0.01 | -0.01 | 0.05 | -0.02 |
| 29. School provides Title I related services | -0.06 | -0.06 | -0.06 | -0.03 | -0.01 | -0.04 | -0.03 | -0.03 | -0.00 | 0.02 | -0.06 | -0.04 | -0.03 | -0.00 | 0.00 | 0.03 |
| 30. School teachers and principle ESL experiences | -0.05 | -0.03 | -0.01 | -0.01 | -0.09 | -0.06 | -0.04 | -0.03 | -0.02 | -0.10 | -0.08 | -0.04 | -0.01 | -0.01 | -0.08 | 0.01 |

Appendix Table 11. Cont.

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31. School providing any services to ESL families | -0.02 | 0.02 | -0.01 | -0.03 | -0.01 | -0.02 | 0.01 | -0.02 | 0.02 | -0.00 | -0.03 | 0.00 | -0.00 | -0.02 | -0.02 | -0.02 |
| 32. Academic standards too low | 0.07 | 0.06 | 0.09 | 0.07 | 0.05 | 0.05 | 0.06 | 0.12 | 0.07 | 0.05 | 0.07 | 0.07 | 0.11 | 0.08 | 0.06 | -0.02 |
| 33. School stability | 0.06 | 0.07 | 0.06 | 0.07 | 0.08 | 0.04 | 0.06 | 0.04 | 0.06 | 0.07 | 0.04 | 0.06 | 0.03 | 0.04 | 0.07 | -0.06 |
| 34. Student learning environment | 0.03 | 0.03 | 0.01 | 0.03 | 0.01 | 0.04 | 0.02 | 0.02 | 0.01 | 0.02 | 0.04 | 0.03 | 0.01 | 0.03 | 0.02 | 0.03 |
| 35. Student average academic performance | 0.10 | 0.05 | 0.03 | 0.07 | 0.04 | 0.03 | 0.04 | 0.06 | 0.07 | 0.04 | 0.07 | 0.05 | 0.02 | 0.05 | 0.06 | 0.03 |
| 36. Teacher teaching effort | -0.00 | -0.02 | -0.01 | -0.02 | 0.01 | 0.00 | -0.01 | 0.04 | 0.04 | 0.02 | -0.01 | 0.00 | 0.03 | 0.01 | 0.02 | -0.00 |
| 37. School supportive and teaching environments | 0.12 | 0.12 | 0.10 | 0.14 | 0.12 | 0.12 | 0.11 | 0.11 | 0.13 | 0.12 | 0.14 | 0.13 | 0.11 | 0.14 | 0.11 | -0.07 |
| 38. School work climate | 0.04 | 0.04 | 0.01 | 0.07 | 0.07 | 0.03 | 0.04 | 0.04 | 0.07 | 0.06 | 0.03 | 0.03 | 0.02 | 0.06 | 0.05 | -0.03 |
| 39. School physical facility/resources | 0.05 | 0.02 | 0.03 | 0.02 | 0.00 | 0.03 | 0.03 | 0.02 | 0.04 | 0.02 | 0.02 | 0.00 | 0.04 | 0.01 | 0.02 | 0.00 |

## Appendix Table 11. Cont.

|  | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Externalizing |  |  |  |  |  |  |  |  |  |
| 18. Spring First | 0.14 |  |  |  |  |  |  |  |  |
| 19. Spring Third | 0.12 | 0.21 |  |  |  |  |  |  |  |
| 20. Spring Fifth | 0.08 | 0.12 | 0.15 |  |  |  |  |  |  |
| Internalizing |  |  |  |  |  |  |  |  |  |
| 21. Fall K | 0.08 | 0.01 | 0.01 | 0.01 |  |  |  |  |  |
| 22. Spring K | 0.71 | 0.02 | 0.05 | 0.01 | 0.18 |  |  |  |  |
| 23. Spring First | 0.03 | 0.32 | 0.04 | 0.01 | 0.04 | 0.05 |  |  |  |
| 24. Spring Third | 0.04 | 0.06 | 0.51 | 0.06 | 0.03 | 0.05 | 0.06 |  |  |
| 25. Spring Fifth | 0.03 | 0.04 | 0.04 | 0.53 | 0.03 | 0.04 | 0.04 | 0.08 |  |
| School-level Factors at Fifth Grade |  |  |  |  |  |  |  |  |  |
| 26. Attending public school | -0.01 | 0.01 | 0.04 | 0.00 | -0.04 | -0.01 | 0.01 | 0.04 | -0.00 |
| 27. Minority student composition | 0.00 | 0.01 | 0.02 | -0.05 | -0.02 | -0.05 | -0.04 | -0.00 | -0.08 |
| 28. School provides instructional ESL | 0.00 | -0.00 | 0.01 | -0.08 | 0.01 | 0.01 | 0.02 | 0.01 | -0.04 |
| 29. School teachers and principle ESL experiences | 0.01 | 0.00 | 0.01 | 0.11 | 0.02 | 0.03 | 0.00 | 0.01 | 0.07 |
| 30. Schools provide Title I services | 0.03 | 0.03 | 0.03 | -0.02 | 0.02 | 0.03 | 0.04 | 0.04 | 0.00 |
| 31. School providing any services to ESL families | 0.01 | -0.02 | 0.01 | 0.01 | -0.02 | -0.00 | -0.01 | -0.00 | 0.00 |
| 32. Academic standards too low | -0.04 | -0.08 | -0.08 | -0.06 | -0.04 | -0.05 | -0.06 | -0.06 | -0.06 |
| 33. School stability | -0.05 | -0.00 | -0.00 | -0.04 | -0.03 | -0.04 | -0.01 | -0.01 | -0.03 |
| 34. Student learning environment | -0.01 | -0.02 | -0.02 | -0.06 | -0.01 | -0.01 | -0.02 | -0.02 | -0.06 |
| 35. Student average academic performance | -0.04 | -0.06 | -0.06 | -0.04 | -0.03 | -0.06 | -0.06 | -0.06 | -0.03 |
| 36. Teachers' teaching effort | -0.00 | -0.02 | -0.02 | -0.01 | 0.02 | 0.03 | -0.02 | -0.02 | 0.02 |
| 37. School supportive and teaching environment | -0.07 | -0.08 | -0.08 | -0.11 | -0.06 | -0.06 | -0.08 | -0.08 | -0.09 |
| 37. Student work climate | -0.03 | -0.01 | -0.01 | -0.04 | -0.02 | -0.03 | 0.00 | 0.00 | -0.03 |
| 38. School physical facility/resources | -0.02 | -0.02 | -0.02 | -0.04 | 0.00 | -0.01 | -0.01 | -0.01 | -0.03 |

Note. Numbers in bold represent the correlation coefficient is at least at $p<.05$.

Figure 1.1 Predicted Reading T Scores For Children of Latino Origins and Native-Born Hispanic From Kindergarten to Fifth Grade


Note. Native-Born Non-Hispanic White was the reference group identified as English Monolingual in this figure.

Figure 1.2 Predicted Math T Scores For Children of Latino Origins and Native-Born Hispanic From Kindergarten to Fifth Grade


Note. Native-Born Non-Hispanic White was the reference group identified as English Monolingual in this figure.

Figure 2.1 Predicted Approach To Learning Z Scores For Children of Latino Origins and Native-Born Hispanic, From Kindergarten to Fifth Grade


Note. Native-Born Non-Hispanic White was the reference group identified as English Monolingual.

Figure 2.2 Predicted Self-Control Z Scores For Children of Latino Origins and Native-Born Hispanic, From Kindergarten to Fifth Grade


Note. Native-Born Non-Hispanic White was the reference group identified as English Monolingual in this figure.

Figure 2.3 Predicted Interpersonal Z Scores For Children of Latino Origins and Native-Born Hispanic, From Kindergarten to Fifth Grade


Note. Native-Born Non-Hispanic White was the reference group identified as English Monolingual in this figure.

Figure 2.4 Predicted Externalizing Z Scores For Children of Latino Origins and Native-Born Hispanic, From Kindergarten to Fifth Grade


Note. Native-Born Non-Hispanic White was the reference group identified as English Monolingual in this figure.

Figure 2.5 Predicted Internalizing Z Scores For Children of Latino Origins and Native-Born Hispanic, From Kindergarten to Fifth Grade


Note. Native-Born Non-Hispanic White was the reference group identified as English Monolingual in this figure.

Figure 3.1 Predicted Reading T Scores For Children of Asian Origins and Native-Born Asian From Kindergarten to Fifth Grade


Note. Native-Born Non-Hispanic White was the reference group identified as English Monolingual in this figure.

Figure 3.2 Predicted Math T Scores For Children of Asian Origins and Native-Born Asian From Kindergarten to Fifth Grade


Note. Native-Born Non-Hispanic White was the reference group identified as English Monolingual in this figure.

Figure 4.1 Predicted Approach to Learning Z Scores For Children of Asian Origins and Native-Born Asian, From Kindergarten to Fifth Grade


Note. Native-Born Non-Hispanic White was the reference group identified as English Monolingual in this figure.

Figure 4.2 Predicted Self-Control Z Scores For Children of Asian Origins and Native-Born Asian From Kindergarten to Fifth Grade


Note. Native-Born Non-Hispanic White was the reference group identified as English Monolingual in this figure.

Figure 4.3 Predicted Interpersonal Z Scores For Children of Asian Origins and Native-Born Asian From Kindergarten to Fifth Grade


Note. Native-Born Non-Hispanic White was the reference group identified as English Monolingual in this figure.

Figure 4.4 Predicted Externalizing Z Scores For Children of Asian Origins and Native-Born Asian From Kindergarten to Fifth Grade


Note. Native-Born Non-Hispanic White was the reference group identified as English Monolingual in this figure.

Figure 4.5 Predicted Internalizing Z Scores For Children of Asian Origins and Native-Born Asian From Kindergarten to Fifth Grade


Note. Native-Born Non-Hispanic White was the reference group identified as English Monolingual in this figure.

