This study investigates whether the growing use of standardized testing methods may impact learners differently across language proficiency levels. Survey and language proficiency data from 22 second grade native (African American) and non-native (Hispanic and Vietnamese) English speakers were analyzed to examine whether worry, or test anxiety, foreign language anxiety, efficacy, and environmental pressures manifest differently depending on students' language proficiency levels (defined to include a measure of reading ability). The results confirm research findings that performance anxiety varies inversely with language proficiency. Environmental pressure is found to impact learners unevenly across the language spectrum. Reported self-efficacy did not vary systematically with language ability, although demographic data suggest efficacy may relate to native language literacy (or literacy in the home). Implications for future research, classroom practices, and policy makers are also considered. (Contains 19 references.) (Author/SM)
A Classroom Research Project: 
The Psychological Effects of Standardized Testing on
Young English Language Learners at
Different Language Proficiency Levels

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The Psychological Effects of Standardized Testing on Young English Language Learners at Different Proficiency Levels

Abstract

This study investigates whether the growing use of standardized testing methods may impact learners differently across language proficiency levels. Survey and language proficiency data from 22 second grade native (African American) and non-native (Hispanic and Vietnamese) English speakers was analyzed to examine whether worry, or test anxiety, foreign language anxiety, efficacy, and environmental pressures manifest differently depending on students' language proficiency levels (defined to include a measure of reading ability). The results confirm research findings that performance anxiety varies inversely with language proficiency. Environmental pressure is found to impact learners unevenly across the language spectrum. Reported self-efficacy did not vary systematically with language ability, although demographic data suggests efficacy may relate to native language literacy (or literacy in the home). Implications for future research, classroom practices and policy makers are also considered.

1 - Introduction

Studies of student performance on standardized tests have found academic achievement to vary with numerous socio-economic, environmental and affective factors. In the design of most assessments, knowing the language of the test is prerequisite for success. Research suggests that children acquire second languages at different rates depending on age of second language acquisition, years of schooling, native language literacy, and a host of other contributing factors (Garcia, 2000; Gass and Selinker, 2001). Hence, the test scores of English language learners (ELL students) may reflect both linguistic and academic ability. The smaller the gap in linguistic competence relative to native speakers, the more informative test scores will be, all else equal. The corollary to this is that absent sufficient language training, students with limited English proficiency are less likely to succeed in tests, regardless of their academic competence. As a result, States have made various accommodations for ELL students taking standardized
tests, including exemption at the early stages of language acquisition.

Standardized tests serve different purposes at the elementary and secondary levels of education. In both cases, these tests are used as instruments of accountability for student performance (Coltrane, 2002; Menken, 2000). However, at the upper grade levels, standardized assessments can be particularly “high stakes” for students. Faced with imperfect information, universities and businesses use test scores to discriminate among high school students in allocating scarce educational and employment opportunities (Gifford, 1990). Students who fail to meet designated thresholds of performance are automatically excluded from the eligible pool.

By contrast, at the elementary and middle school levels standardized tests are particularly “high stakes” for educators who stand to be transferred or lose their jobs if they fail to adequately improve educational outcomes. Under the No Child Left Behind Act (2001), States are responsible for ensuring “adequate yearly progress” to close the achievement gap for all minority students, including second language learners (Keegan, Orr & Jones, 2002). The inclusion of ELL students in wide-scale assessments makes school districts accountable for student progress. As a practical matter, the younger the student the greater scope there is for teachers to relay skills and foster student learning. If used in ways that promote student learning, standardized assessments can contribute to greater accountability and improved educational opportunities for ELL students.

The question addressed in this study is whether state-mandated use of standardized reading assessments at the lower primary level stands to impact student learning differently at different English language proficiency levels. The project was motivated by growing anecdotal evidence that standardized tests (and the increased
use of such instruments in the classroom in preparation for testing) may impart negative influences on the attitudes of certain ELL students. Specifically, classroom research was conducted to investigate the psychological effects of standardized testing on second grade ELL students at different language proficiency levels. For the purposes here, “psychological effects” refers to any affective factor (such as effort, efficacy, anxiety) that can have a lasting influence on child learning. Language proficiency refers to oral and reading ability. Most studies to date on second language acquisition (SLA) and achievement have focused on high school or university learners. This classroom research project applies methodology from the research literature to investigate the impact of high stakes testing on younger language learners.

2 - Literature Review
The research literature on standardized testing and second language acquisition is quite extensive. For the purposes of this study, a selection of articles investigating test anxiety, foreign language anxiety, and efficacy as they relate to standardized or high stakes testing and “English as a second language” were chosen for review.

2.1 - Test Anxiety
Decades of research in educational psychology has shown that worry and high anxiety are associated with low cognitive performance and negatively correlate with academic achievement (Malpass, O’Neil & Hocevar, 1999). This is particularly true of tasks requiring higher order thinking. By contrast, Mulenvon, Connors and Lenares (2001) find no evidence that anxiety or pressure negatively impact student achievement. The authors observe that the vast majority of recent educational articles that warn about the damaging effects of high stakes testing are actually based on teacher opinion and anecdotal evidence. The authors note that less than 5% of articles today are actually “research based”, that is, based on
statistical analysis and reflecting views of students themselves rather than the opinions of teachers.

Based on a cross-sectional study of 283 elementary students at 10 schools in Arkansas, Mulenvon et al. (2001) found no evidence of potentially harmful effects of testing on elementary student achievement. The study combined performance on both criteria- and a norm-referenced standardized tests and students’ responses to a survey to investigate multivariate relationships between test anxiety, pressure, rewards, efficacy and test scores. The findings indicate no evidence that anxiety or pressure negatively impact student achievement. However, as the authors point out, a limitation of the study is the potential bias arising from self selection in the survey data itself, with a disproportionate number of parents of high performing student consenting to participate. Also, the impact of testing on language minority students was not specifically addressed. The authors conclude that the concept of self-efficacy warrants further study to evaluate its impact on student performance. Also, their research suggests that teacher attitude towards testing be investigated further as a possible environmental influence on student performance.

The harmful effects of high stakes testing on high school ELL students have been documented through ethnographic research (Valenzuela, 2000). Valenzuela draws on a three year qualitative case study of the Texas Assessment of Academic Skills (TAAS) test as it affects regular-track, Mexican American and Mexican immigrant students. Based on extensive student interviews, the author identifies the TAAS as “one of a number of inflexible school structures that discourages Mexican immigrant and Mexican American youths alike from pursuing higher educational opportunities” (p.528). Her research documents students’ deep frustration with difficulties in reading the long passages of the TAAS, and a sense of hopelessness about the rapidity with they are expected to learn English. Her
research describes a negative spiral of successive failures that effectively lower students’ expectation of success, notwithstanding their motivation and aspiration to succeed.

Malpass et al. (1999) used a structural equation model to investigate the effects of gender, cognitive habits and affective factors (including worry) on high-stakes mathematical achievement at the secondary level. The findings confirm previous research that has shown worry to negatively impact achievement. However, because the model used by the authors includes additional variables not previously tested that correlate with worry, the independent effect of worry on achievement was not as significant. In other words, the high school subjects in this study were advanced math students who employed metacognition or mental strategies that tend to alleviate worry. Therefore, less proficient students lacking necessary skills to succeed would likely manifest more significant worry. Subsection 2.3 discusses this study further.

2.2 - Foreign Language Anxiety
Researchers and educators have found foreign language anxiety to be one of the most significant predictors of second language achievement (Onuegbuzie, Bailey & Daley, 2000; Julkunen, 1992). Foreign language anxiety refers to situation-specific anxiety arising from a deficit in foreign language ability and is distinct from trait anxiety which is linked to personality (Gass, 2001). As a state or situation-specific variable, linguistic anxiety shares cognitive and emotional properties with theoretical constructs described and measured in educational research on high stakes testing (Mulvenon et al., 2001; Malpass et al., 1999). However, foreign language anxiety is also distinct from the sort of anxiety that native English speaking (or ELL students) might feel taking a test. SLA research
has shown that foreign language anxiety is common among ELL students, and that such communicative stress negatively impacts language performance. These findings are well established in the SLA literature (Julkenen, 1992; Onuegbuzie et al., 2000).

A Finnish cross-sectional study of 552 sixth and eighth grade ELL learners found high significant negative correlation between anxiety (both state and trait) and language achievement (Julkenen, 1992). The study was based on student survey and language performance data. Less anxious students systematically outperformed those with high communicative stress in English, and students with stronger English skills were notably less anxious than low achievers.

Onwuegbuzie et al. (2000) examine a refined scales for measuring foreign language anxiety at 3 different stages of the language learning process, namely the input, processing and output phases. Using a survey of 258 university students and language performance data, the authors find some evidence that foreign language anxiety may manifest at 3 distinct stages and that input anxiety is most closely related to global foreign anxiety. The study confirms prior findings that the fear or anxiety experienced by foreign language students when presented with new vocabulary or sentence structures may reduce the efficacy of input, thereby hindering student performance or output (the retrieval of previous learning).

Longitudinal evidence that communicative stress impacts negatively on high school ELL students is most graphically provided by ethnographic research (Valenzuela, 2000), as discussed in the previous section. Valenzuela’s field notes document a propensity for ELL students to be discouraged and to eventually give up under pressure to perform on standardized tests that are designed for native English speaking ability levels. Valenzuela’s research finds that rather than
promote the interests of underserved children, the accountability system instituted
in Texas is serving to discourage and alienate youths of Mexican origin who in
earlier grades were motivated to achieve.

Finally, there is clear evidence that students with limited early formal schooling in
their native language (L1) take longer to acquire literacy skills in L2 compared
with students that have L1 literacy (Alcala 2000; Garcia, 2000). The number of
ELL students from homes lacking native language literacy is growing in the U.S.
(Alcala, 2000). Hence, the likelihood these students will acquire the reading skills
needed to succeed on standardized tests within the three year exemption period
typically allowed by states is slim relative to their more literate cohorts. SLA
research indicates that students facing a lower subjective probability of success can
experience elevated foreign language anxiety to the extent they are motivated to
succeed (Gass & Selinker, 2001, p.357).

2.3 - Efficacy
There is growing evidence in psychological and educational research that efficacy
or self-efficacy is one of the key antecedents to higher academic achievement
(Jinks & Morgan, 1999; Malpass et al., 1999; Mulvenon et al., 2000). Efficacy
was originally defined by Bandura (1986) as “people’s judgments of their
capabilities to organize and execute courses of action required to attain designated
types of performances” (p.391). Efficacy is related to other affective factors such
as self-esteem, effort or motivation. However, what distinguishes it is that people
with high self-efficacy heighten and sustain their effort or task involvement in the
face of failure (Jinks & Morgan, 1999; Malpass et al., 1999). Students with high
efficacy will tend to attribute failure on a task to a missing skill or strategy
otherwise acquirable, not to a missing intellectual trait (Malpass et al., 1999). The
corollary, also supported by research, is that low academic achievers who doubt
their ability will tend to give up more easily on a learning process if early efforts do not result in perceived success (Jinks & Morgan, 1999).

A study by Malpass et al. (1999) investigated the effects of a number of affective and metacognitive factors on high stakes mathematical achievement. Multivariate analysis was performed on cross-sectional survey and test data of 144 10th to 12th grade students from six public high schools in Southern California. The authors find that self-efficacy is positively related with mathematical achievement and highly negatively related to cognitive worry or anxiety, which impact negatively on achievement.

Jinks and Morgan (1999) conducted a large survey (900 usable returns) of three 4th through 8th grade public schools with very different demographics using an efficacy scale that had undergone extensive development to ensure validity and reliability. The research supports the finding that self-efficacy beliefs do affect educational outcomes indirectly by leading to behaviors that in turn contribute to achievement. One implications of these findings is that students “who suffer from low self-efficacy are unlikely to be motivated by traditional assessment practices that focus on pointing out inadequacies” (p.288).

Indeed, anyone who has taught children knows how important it is for students to experience success in the classroom, to build their confidence and to believe they can make a difference in their learning. Assessment and learning are inextricably linked. Research indicates that students who are encouraged to adopt “mastery or goal orientation” in learning are more likely to gain self confidence and eventually succeed (Malpass et al., 1999; Valdez Pierce, 2002). In other words, having high motivation is not enough. To be efficacious students also require cognitive and metacognitive strategies that can be employed to raise their likelihood of
The preponderance of SLA and ESL research points in the same direction. Multiple alternative assessments are essential in lowering communicative stress and promoting mental habits and strategies that support second language acquisition and academic achievement (Alcala, 2000; Bailey, 1998; O’Malley & Valdez Pierce, 1996; Valdez Pierce, 2002). It stands to reason that any tangible progress students make would not only motivate them to try harder, but would also positively reinforce their sense of self-efficacy—the confidence they have that they can influence or affect their own learning over time.

By contrast, high stakes tests are “outcome” orientated. They are specifically designed to discriminate among competing agents possessing a range of intellectual abilities at a point in time. Although intelligences are only “fixed” for the purposes of the standardized “snap shot”, some students may internalize this self image and gauge their self worth on the basis of these scores. Indeed, children who come to view their intelligence as a fixed trait are less likely to be self-directed and to adopt learning goals (Malpass et al., 1999). Hence, low performing students are more at risk of becoming less efficacious over time owing to a negative spiral of successive failures that lower their expectation of success, as Valenzuela (2000) documents.

3 - Research Question

The research surveyed here suggests that standardized tests can affect student achievement in several ways. High communicative stress can hinder language acquisition, test anxiety can contribute to lower scores, and poor performance on tests over time can cause students to lower their expectation of future success, thereby lowering their drive to affect their own learning (low self-efficacy).
This classroom research project investigates whether the affective and environmental factors discussed in the literature review vary by language proficiency levels in young ELLs. Specifically, ELL students may:

1. experience foreign language anxiety,
2. experience test anxiety or worry,
3. exhibit varying degrees of efficacy,
4. be under pressure to perform from the school environment.

The extent to which these factors vary with ELL students' language and reading ability at the second grade level is investigated.

One hypothesis is that students with native language schooling may be inherently more optimistic about their prospects of acquiring English and meeting the academic standards, whereas ELL students lacking L1 literacy may be inherently discouraged on both accounts. In this case students with stronger English language proficiency would be expected to be less anxious and more efficacious than students at lower English proficiency levels. The alternative hypothesis is that students with low subjective probabilities of succeeding on tests may simply check out (have low efficacy) across all proficiency levels. For example, student resignation could be a rational response if benchmarks for "adequate yearly progress" were set so high as to preclude success at each English language proficiency level short of native ability.

Also, students who worry about exams may feel pressured to perform by their teachers and/or parents. These environmental influences can add to the anxiety students feel, or may simply explain reported anxiety. Either way, what is of interest here is whether environmental influences vary with students' language proficiency.
4 - Methodology
A survey questionnaire with 18 items testing for the presence of student efficacy, test worry or anxiety, foreign language anxiety and environmental pressures was administered to 22 second grade students at an elementary inner-city public school in Washington, DC. The second grade class included 10 ELL (nine Hispanic and one Vietnamese) students with diverse oral and reading abilities and 12 African American native English speakers also of varying reading proficiencies. One week following the survey, a standardized reading test was given to 7 of the ELL students during an ESL pullout class. The test was selected from second grade Test Ready reading materials (Adcock, 1990). It was administered using the District of Columbia’s accommodations for ELL students whereby stories are read to non-proficient ELL students but not the question and answer parts. The same questionnaire was readministered immediately following the reading test to assess any change in situational stress. The survey responses were then analyzed by language proficiency levels derived from multiple language and reading assessment data.

The methodology adopted here is similar to that of Julkenen (1992) who employed a survey both before and after administering the test. Other survey-based studies employed one survey either before or after a performance test, or in conjunction with reported performance data (an approach also emulated here). No attempt is made to assess the reliability or statistical significance of the findings

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1 Ideally the reading test would have been administered to the entire second grade class, including all 10 ELL students. This was not feasible owing to limited time for inclusion (both teachers in the homeroom). So, the reading test was administered during ESL pullout. The day of the test, one proficient ELL student was absent and two highly proficient students (both in the process of being exited from ESL) were not available to be pulled. For this reason 7 students were tested.

2 Office of Bilingual Education, District of Columbia.
reported here. However, since this research is modeled on practices in the literature, the findings are at least of heuristic value.

4.1 - The Survey Questionnaire
The eighteen survey questions shown in Appendix A were derived from four questionnaires used by Jinks and Morgan (1999), Malpass et al. (1999), Mulvenon et al. (2000), and Onuegbuzie et al. (2000). Appendix B shows the correspondence between original source and current survey questions and designated scale variables.

Questions 1 to 7 of the survey solicit responses about student self-efficacy, questions 8 through 11 ask about student worry or general test anxiety, questions 12 to 14 are intended to gauge foreign language anxiety, and questions 15 to 18 assess possible environmental influences.

Table 1: Summary of Survey Questionnaire (Appendix A)

<table>
<thead>
<tr>
<th>Survey Nos.</th>
<th>Notation</th>
<th>Scale Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-7</td>
<td>EFF</td>
<td>efficacy</td>
</tr>
<tr>
<td>8-11</td>
<td>W</td>
<td>worry / test anxiety</td>
</tr>
<tr>
<td>12-14</td>
<td>FLA</td>
<td>foreign language anxiety</td>
</tr>
<tr>
<td>15-18</td>
<td>ENV</td>
<td>environment</td>
</tr>
</tbody>
</table>

Abbreviated notation in Table 1 is used throughout to designate variables.

The original wording of the survey questions was modified to correspond better to
second grade cognition. For example, vocabulary had to be simplified (“I use multiple thinking techniques and strategies” was simplified to “I can learn to read with practice” in survey question no. 3). Double negatives were eliminated (“no matter how hard I try I cannot understand” was restated as “I have difficulty” in survey question no. 14). Many of the questions originally stated in the negative (e.g., what I learn in school is not important) were restated in the positive. Also, the focus of some questions was shifted from oral proficiency or mathematical ability to reading ability. The usual 5 point Likert-scale typically used in the literature was reduced to a three point scale (Yes = I agree, ? = maybe, No = I disagree). This minimized possible student transcription errors and was more appropriate for second graders.

The survey questions were read by the researcher to the students in English in a neutral tone and were paraphrased to ensure everyone understood. Students were encouraged to respond honestly. They were assured the results would only be used to improve teaching practices. For example the students were told “this survey is not a test. Please answer honestly. This is your chance to say what you think. If you answer honestly, you will help us (your teachers) do a better job of teaching you.”

4.2 - Language and Reading Proficiency Levels
To assess whether survey responses vary with language proficiency, ELL students were categorized as NEP (non-English proficient) or LEP (limited English proficient) depending on their oral and reading abilities. The District of Columbia’s Pre-LAS scores (which prior to 2002 reflect only oral proficiency) were adjusted to also account for students’ ability to read. Reading ability was gauged by (1) grade levels suggested by the Slossons sight word diagnostic, (2) second grade reading scores from the First Advisory, (3) ELL Matrix Scores and
(4) where available, students’ SAT 9 scores. Also considered are the number of years each student has been schooled in English and native language literacy (L1 literacy). Language proficiency and demographic data is tabulated in Appendix C. Information on native language (L1) schooling and/or home literacy (literacy of guardians or older siblings) was obtained through parent-teacher conferences. Also, considered in the analysis of the findings (but not tabulated here) are native speakers’ Slossons and classroom reading scores.

5 - Analysis of Findings

It must be emphasized that the results of this study are only suggestive, as both sample size and the wording of survey questions did not yield significant variation in responses. The limited spread in the data may be due in part to developmental factors overlooked when the survey questions were modified to be suitable for second graders. For example, questions FLA13 and FLA14 (originally used in conjunction with university second language learners to measure the presence of foreign language anxiety) produced responses from native speakers as well. Upon closer examination this is not surprising since native English speaking second graders are also in the process of acquiring literacy, albeit in their first language.

5.1 - Survey Results

Affirmative and negative responses of the 22 second grade students to the questionnaire are tabulated as percentages within each language proficiency group in Appendix D. Item numbers correspond directly to the survey questions in Appendix A, and the four affective and environmental variables are denoted by the notation from Table 1. Language proficiency levels are designated as “native” for the 12 English speaking African American students and “non-native” for the response of the 10 ELL students. Total non-native responses are further subdivided into NEP and LEP, based on students’ language proficiency grouping.
(shown in Appendix C). Since most non-affirmative responses were of the “no” rather than “maybe” genre, negative responses (“no/maybe”) have been combined to simplify presentation and analysis.

Table 2: Distribution of Negative (“No/Maybe”) Responses to Select Questions by Language and Reading Proficiency Levels

<table>
<thead>
<tr>
<th>Questions that produced a high variance in response (stated in the negative).</th>
<th>Native readers</th>
<th>Non-Native readers (LEPs)</th>
<th>Native non-readers</th>
<th>Non-native non-readers (NEPs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFF 7 - will not go to college</td>
<td>20%</td>
<td>20%</td>
<td>40%</td>
<td>20%</td>
</tr>
<tr>
<td>W11 - Not nervous taking tests</td>
<td>50%</td>
<td>25%</td>
<td>12.5%</td>
<td>12.5%</td>
</tr>
<tr>
<td>FLA 14 - No difficulty reading</td>
<td>80%</td>
<td>20%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>ENV18 - Not pressured to test well</td>
<td>20%</td>
<td>40%</td>
<td>0%</td>
<td>40%</td>
</tr>
</tbody>
</table>

Also, to facilitate closer examination, survey items which generated among the most variation in response are further analyzed by reading ability. Native speakers’ were divided into two groups, “readers” and “non-readers” based on their Slossons and reading scores from the First Advisory. Table 2 shows how negative responses distribute across linguistic and reading abilities for each select survey item. Native speakers who can read are at one end of the language proficiency spectrum, followed by LEP students (orally proficient readers), followed by native non-readers, followed by NEP student (less proficient non-readers).
5.2 - Test and Foreign Language Anxiety

The responses in Appendix D suggest that, on the whole, ELL students appear more worried about grades and testing than native speakers (see W9-W11). For example, only 58% of native speakers worry they will not pass the grade compared with 80% of ELL students (W10). Also, among ELL students, NEPs appear more anxious about doing well on tests compared with LEPs (W11). Moreover, Table 2 reveals that while more native speakers report not being anxious about testing (62.5%) compared to 32.5% in the case of non-native speakers), more of the variance in response to item W11 appears to be associated with reading rather than oral language ability (75% combining both native and non-native readers). Therefore, using language proficiency as a proxy for academic achievement, these findings are consistent with the hypothesis and research findings that test anxiety or worry varies inversely with ability (see subsection 2.1). The findings also suggest that "language ability" defined to also include a measure of "ability to read" may have more predictive value at the lower grade levels.

ELL students did not exhibit heightened situational test anxiety in this study. Their responses to the survey questions before and after taking the mock standardized reading test were identical, probably reflecting the fact that the test accommodations allowed for ELL students in the District of Columbia did not serve to raise test anxiety.

Finally, the observation that NEP student are more worried about testing than LEP students is consistent with NEPs' slightly higher reported foreign language anxiety (see FLA12-FLA14 in Appendix D). As noted earlier, the FLA survey questions (as worded) did not discriminate sufficiently between native and non-native speakers. Hence, ELL students' responses to questions about general test
anxiety (W8-W11) may also reflect a measure of foreign language anxiety as well. Moreover, the fact that second grade native speakers are developmentally just learning to read explains why reading may be more significant (see FLA14 in Table 2.)

5.3 - Environmental factors
Interestingly, native speakers are reportedly less anxious about testing than second language learners notwithstanding much higher reported environmental pressure to perform (ENV18). That 92% of native speakers report feeling pressured to do well on tests compared with 60% of ELL students is not surprising. First, until 2002 the SAT-9 scores of ELL students were not considered in teachers' performance evaluations. Hence, some teachers may have put less pressure on ELL students to perform on standardized tests. Second, 50% of ELL students participating in this study were not required to take the SAT 9 last year, while those who were took it with accommodations. The extra time allotted to ELL students to complete the test probably resulted in less overall situational anxiety. Third, ELL students are assessed through alternative portfolio methods which impart less pressure compared with periodic “all or nothing” select-response testing (the formats accompanying most public school curriculum materials).

Also, Table 2 reveals that whereas both strong and weak ELL readers report not feeling pressured to perform on tests (each accounts for 40% of negative responses), among native speakers only strong readers are reportedly unaffected by environmental pressure (20%). Hence, environmental pressure seems to impact learners differently across the language spectrum.

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1 While this kind of differential treatment could suggest a “lack of accountability” for ELL students, from an SLA perspective less pressure to perform is normally positive in promoting language acquisition.
5.4 - Efficacy

On the whole, ELL students appear slightly more efficacious or optimistic about their prospects for learning than native speakers (see EFF1 - EFF7 in Appendix D). However, among ELL students, NEP students are less confident than LEPs (EFF3-EFF4). Low self-efficacy among native speakers is most striking in response to whether they think they will go to college (EFF7). However, upon closer examination, while 60% of those who believe they will not go to college are native speakers, 60% also qualify as poor readers (see native and non-native responses to EFF7 in Table 2). This suggests that, unlike performance anxiety, efficacy does not vary directly with language proficiency.

Finally, a more detailed analysis of individual survey responses indicates that students who report low self-efficacy also report being less anxious about testing across linguistic and reading abilities. (Cross correlations not tabulated here.) Notably, LEP students report feeling relatively less able to solve hard problems compared with NEPs (EFF5) even though overall they report being more-efficient (EFF2-EFF4 in Appendix D). A similar correlation between low efficacy and low test anxiety was found among native speakers as well. This is a striking finding. The covariance of low efficacy and low anxiety across language groups supports the alternative hypothesis of possible student resignation. Demographic data on the ELL population shown in Appendix C reveals further that efficacy may be relate to native language literacy (students with home literacy reported being more efficacious than those lacking support for literacy at home). All ELL students who reported low efficacy in the survey (both readers and non-readers alike) lack L1 literacy, while those with high efficacy are either themselves literate in L1 or their parents are (with one possible exception).
The possible influence of L1 literacy on efficacy is also evident in ELL students' performance on the mock standardized reading test. (Test scores are tabulated in the first column of Appendix C.) Of the two LEP students to take the test (Students 7 and 8) the one lacking L1 literacy scored the lowest (20%), notwithstanding virtually identical measured language proficiencies. These findings are consistent with classroom observations: The least efficacious students appear to lack L2 literacy and/or literacy support at home (as discerned from parent-teacher conferences).

6 - Summary of Findings
As emphasized at the onset, the findings reported here are only suggestive since no attempt has been made to assess statistical significance. Based on an analysis of survey data by language proficiency the following observations emerge:

- **Test anxiety varies inversely with language proficiency.** Less proficient students report being more worried about their performance, all else equal. This is also true of weak readers (native and non-native English speakers alike). This finding is consistent with most of the research literature (reviewed in Section 2).

- **Foreign language anxiety also correlates negatively with language ability.** More proficient students report lower foreign language anxiety (consistent with SLA research findings).

- **Environmental factors appear to impact learners unevenly across the language spectrum.** Native non-readers report the highest environmental pressure to perform on tests.

- **District of Columbia accommodations for ELL students in standardized testing appear not to add to environmental pressure.** Post-test survey results were unchanged.
Efficacy does not vary systematically with language proficiency. ELL students report being slightly more efficacious than native speakers, but low efficacy is observed across all proficiency levels.

Native language literacy appears to vary positively with student efficacy at all language proficiency levels. All ELL students reporting low self-efficacy (reader and non-readers alike) lack L1 literacy. This finding is consistent with classroom observations.

Language proficiency defined to include reading ability (not just oral) appears to have predictive value at a younger developmental age. Observed correlations were more pronounced when reading ability was measured.

7 - Conclusion

What has been learned from this classroom research project about the lasting psychological effects of standardized testing on second grade ELL students at different language proficiency levels? The finding that performance anxiety (both test and foreign language) varies inversely with language proficiency consistent with the research literature does not in and of itself establish causation. However, SLA research cited here has found anxiety to harm achievement at low proficiency levels by interfering with the language acquisition process. This classroom study confirms that students with lower proficiency in English report being more worried about performance than more proficient ones. If under the new legislation second language learners are increasingly exposed to standardized testing practices in the classroom as well as state-wide, low English proficient students could experience a disproportionate increase in performance anxiety, decelerating their rates of language acquisition.

Studies on efficacy and longitudinal evidence from ethnographic research suggest that successive failure to perform can further diminish achievement by lessening
students' sense of efficacy. Among language learners, failure to perform due to a language deficit is directly proportional to students' proficiency levels. If targets for "adequate yearly progress" are set unrealistically, less proficient ELL students—particularly those who cannot yet read— are more prone to be convinced they lack the power to affect outcomes. In this research project low self-efficacy was observed among both native and non-native speakers. However, it was not found to vary systematically with language proficiency. Instead, demographic data on the ELL population suggests that low efficacy may correlate more with the absence of literacy support at home. Hence, ELL students who are both low English proficient and lacking in L1 literacy may be even more at risk of diminished self-efficacy over time.

Finally, assessment methods which focus students and instruction on "outcomes" or "test results" rather than "mastery of skills" and "cognitive processes" may indirectly undermine efficacy and negatively impact learning. There is growing anecdotal evidence that recent emphasis on standardized testing as an accountability measure may be precipitating such a shift in instructional practices.

8 - Implication of Findings
This research project has found that ELL students who are non-English proficient and who lack native language literacy are most at risk of not making "adequate yearly progress" on standardized assessments. While the language gap may initially raise foreign language anxiety (decelerate language acquisition), over time repeated failure on tests can impair these students' efficacy and foster resignation. This project also reveals that native English speakers lacking support for literacy at home may face similar risk of resignation. Such a scenario would be particularly perverse in light of the No Child Left Behind Act since young minds are malleable and otherwise developmentally able to acquire the necessary
skills to succeed. The potential for such a scenario carries implication for the ESL classroom and policy makers concerned with establishing fair and effective systems of accountability.

Since performance anxiety can stifle language acquisition, classrooms that assess NEP students through multiple alternative methods (and limit the use of standardized drills) are more apt to positively influence these students’ learning. Alternative assessments tend to lower test and foreign language anxiety and create opportunities for students to experience success, acquire strategic skills and take control of their own learning process (i.e., become efficacious).

SLA research has shown that students who are literate in their native tongue learn to read English much faster than those who lack support for literacy at home (Alcala 2000; Garcia, 2000). It follows that after three years of schooling, NEP students lacking L1 literacy are unlikely to show the same gains as those who have the benefit of L1 literacy. Hence, where possible, state regulators should attempt to consider native language literacy in setting targets for “appropriate yearly progress” and in the accommodation policies they enable for ELL students.

Finally, educational researchers should continue to explore how efficacy and learning relate in the area of SLA. If standardized tests do affect students with varying language proficiencies and home literacy in a disparate manner, as this classroom research project suggests, this issue should be further investigated.
References


Appendix A

Student Survey

1. I like school. 1. Yes ? No
2. What I learn in school is important. 2. Yes ? No
3. I can learn to read well with practice. 3. Yes ? No
4. Doing homework helps me do better. 4. Yes ? No
5. I can solve hard problems. 5. Yes ? No
6. I will finish school. 6. Yes ? No
7. I will go to college. 7. Yes ? No
8. I worry what my parents will say. 8. Yes ? No
9. I worry my teachers won’t be happy. 9. Yes ? No
10. I worry I won’t pass the grade. 10. Yes ? No
11. I get nervous when I take a test. 11. Yes ? No
12. I like learning English. 12. Yes ? No
13. I get nervous if I don’t understand. 13. Yes ? No
15. I go to a good school. 15. Yes ? No
16. My teachers care if I learn. 16. Yes ? No
17. School is boring. 17. Yes ? No
18. I feel pressure to do well on tests. 18. Yes ? No
## Appendix B: Source of Survey Questionnaire Items

Notation: OB&D = Onwegbuzie et al. (2000); J&M = Jinks & Morgan (1999)

<table>
<thead>
<tr>
<th>Original Source</th>
<th>Original Survey Item (paraphrased)</th>
<th>Corresponding Item in Appendix A</th>
<th>Scale/Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>OB&amp;D, p. 95</td>
<td>1. I am bothered/flustered/upset by someone speaking in a (foreign language).</td>
<td>13. I get nervous if I do not understand (English).</td>
<td>foreign language anxiety</td>
</tr>
<tr>
<td>OB&amp;D, p. 97</td>
<td>1. I never feel tense in (foreign language)</td>
<td>12. I like to learn in English.</td>
<td>foreign language anxiety</td>
</tr>
<tr>
<td>Mulvenon, p. 30</td>
<td>Q5 I am anxious about how well I will do on the test.</td>
<td>11. I get nervous when I take a test.</td>
<td>worry or test anxiety</td>
</tr>
<tr>
<td>Mulvenon, p. 30</td>
<td>Q8 I am anxious what my parents will think about my grades. Q12 - I feel pressure from my parents.</td>
<td>8. I worry what my parent will say (about my grades).</td>
<td>worry or test anxiety</td>
</tr>
<tr>
<td>Mulvenon, p. 30</td>
<td>Q9 I am anxious what my teacher will think about my score</td>
<td>9. I worry my teachers won’t be happy.</td>
<td>worry or test anxiety</td>
</tr>
<tr>
<td>Mulvenon, p. 30</td>
<td>Q11 I am anxious my grades will affect my progress.</td>
<td>10. I worry I won’t pass the grade.</td>
<td>worry or test anxiety</td>
</tr>
<tr>
<td>Mulvenon, p. 30</td>
<td>Q13 I feel pressure from my teachers to score high.</td>
<td>18. I feel pressure to do well on tests.</td>
<td>school climate</td>
</tr>
<tr>
<td>J &amp; M, p. 226</td>
<td>20. What I learn in school is not important.</td>
<td>2. What I learn in school is important.</td>
<td>efficacy</td>
</tr>
<tr>
<td>J &amp; M, p. 226</td>
<td>9. I always get good grades when I try hard.</td>
<td>3. I can learn to read well with practice.</td>
<td>efficacy</td>
</tr>
<tr>
<td>J &amp; M, p. 226</td>
<td>5. Most of my classmates work harder on their homework than I do.</td>
<td>4. Doing homework helps me do better (at school).</td>
<td>efficacy</td>
</tr>
<tr>
<td>J &amp; M, p. 226</td>
<td>22. I do not get good grades because it’s too hard.</td>
<td>5. I can solve hard problems.</td>
<td>efficacy</td>
</tr>
<tr>
<td>J &amp; M, p. 226</td>
<td>28. I will quit school as soon as I can.</td>
<td>6. I will finish school.</td>
<td>efficacy</td>
</tr>
<tr>
<td>J &amp; M, p. 227</td>
<td>13. When I am old enough I will go to college.</td>
<td>7. I will go to college.</td>
<td>efficacy</td>
</tr>
<tr>
<td>J &amp; M, p. 227</td>
<td>25. I am a good reading student.</td>
<td>8. I have difficulty reading.</td>
<td>foreign language anxiety</td>
</tr>
<tr>
<td>J &amp; M, p. 227</td>
<td>8. I go to a good school.</td>
<td>15. I go to a good school.</td>
<td>environment</td>
</tr>
<tr>
<td>J &amp; M, p. 227</td>
<td>15. No one cares if I do well in school.</td>
<td>16. My teachers care if I learn.</td>
<td>environment</td>
</tr>
<tr>
<td>Malpass, p. 284</td>
<td>I kept working even on difficult questions.</td>
<td>5. I can solve hard problems.</td>
<td>efficacy</td>
</tr>
<tr>
<td>Malpass, p. 284</td>
<td>I used multiple thinking techniques and strategies</td>
<td>3. I can learn to read with practice</td>
<td>efficacy</td>
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</table>
## Appendix C: Language Proficiency and Demographic Data

<table>
<thead>
<tr>
<th>Students</th>
<th>Score</th>
<th>Language 1</th>
<th>Pre-LAS Matrix</th>
<th>Matrix</th>
<th>Slossons</th>
<th>SAT 9</th>
<th>Yrs English Schooling</th>
<th>Native L1 Literacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 1</td>
<td>0%</td>
<td>NEP</td>
<td>NEP</td>
<td>0</td>
<td>0</td>
<td>n/a</td>
<td>&lt;1 yr</td>
<td>yes</td>
</tr>
<tr>
<td>Student 2</td>
<td>DNA</td>
<td>NEP</td>
<td>LEP</td>
<td>3</td>
<td>1</td>
<td>B</td>
<td>&gt;3 yrs</td>
<td>no</td>
</tr>
<tr>
<td>Student 3</td>
<td>0%</td>
<td>NEP</td>
<td>LEP</td>
<td>4</td>
<td>1</td>
<td>1/n/a</td>
<td>&lt;1 yr</td>
<td>parents</td>
</tr>
<tr>
<td>Student 4</td>
<td>46%</td>
<td>NEP</td>
<td>NEP</td>
<td>2</td>
<td>1</td>
<td>1.2</td>
<td>n/a</td>
<td>&lt;1 yr yes</td>
</tr>
<tr>
<td>Student 5</td>
<td>DNA</td>
<td>NEP</td>
<td>NEP</td>
<td>4</td>
<td>2</td>
<td>1.5</td>
<td>n/a</td>
<td>&gt;2 yrs</td>
</tr>
<tr>
<td>Student 6</td>
<td>n/a</td>
<td>LEP</td>
<td>NEP</td>
<td>4</td>
<td>3</td>
<td>1.8</td>
<td>P</td>
<td>&gt;3 yrs parents</td>
</tr>
<tr>
<td>Student 7</td>
<td>20%</td>
<td>LEP</td>
<td>LEP</td>
<td>4</td>
<td>4</td>
<td>2.1</td>
<td>P</td>
<td>&gt;3 yrs no</td>
</tr>
<tr>
<td>Student 8</td>
<td>80%</td>
<td>LEP</td>
<td>LEP</td>
<td>4</td>
<td>4</td>
<td>2.5</td>
<td>P</td>
<td>&gt;3 yrs yes</td>
</tr>
<tr>
<td>Student 9</td>
<td>n/a</td>
<td>LEP</td>
<td>LEP</td>
<td>4</td>
<td>4</td>
<td>2.8</td>
<td>P</td>
<td>&gt;3 yrs parents</td>
</tr>
<tr>
<td>Student 10</td>
<td>n/a</td>
<td>LEP</td>
<td>FLUENT</td>
<td>4</td>
<td>5</td>
<td>3.3</td>
<td>P</td>
<td>&gt;3 yrs yes</td>
</tr>
</tbody>
</table>

**Notation:**
- Test Scores: n/a = not applicable or DNA = did not attempt.
- Language Proficiency: NEP = non-English proficient (poor reading skills and low oral proficiency) or LEP = limited English proficient (less than proficient oral skills but proficient reading skills);
- Pre-LAS: District of Columbia oral proficiency scale for pre-literate students (Non-English or Limited English Proficient);
- SAT-9: B = Basic Performance; P = Proficient Performance.
## Appendix D: Distribution of Survey Responses by Language Proficiency Levels

Notation: Native=African American Native Speakers; Non-Native=English Language Learners

<table>
<thead>
<tr>
<th>Question</th>
<th>Native Yes (%)</th>
<th>Native No/Maybe (%)</th>
<th>Non-Native Yes (%)</th>
<th>Non-Native No/Maybe (%)</th>
<th>NEP Yes (%)</th>
<th>NEP No/Maybe (%)</th>
<th>LEP Yes (%)</th>
<th>LEP No/Maybe (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFF1 (likes school)</td>
<td>75</td>
<td>25</td>
<td>90</td>
<td>10</td>
<td>100</td>
<td>0</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>EFF2 (school matters)</td>
<td>92</td>
<td>8</td>
<td>100</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>EFF3 (can learn)</td>
<td>83</td>
<td>17</td>
<td>90</td>
<td>10</td>
<td>80</td>
<td>20</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>EFF4 (work matters)</td>
<td>83</td>
<td>17</td>
<td>90</td>
<td>10</td>
<td>80</td>
<td>20</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>EFF5 (can solve problems)</td>
<td>83</td>
<td>17</td>
<td>70</td>
<td>30</td>
<td>80</td>
<td>20</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>EFF6 (will graduate)</td>
<td>92</td>
<td>8</td>
<td>80</td>
<td>20</td>
<td>80</td>
<td>20</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>EFF7 (will go to college)</td>
<td>75</td>
<td>25</td>
<td>90</td>
<td>10</td>
<td>100</td>
<td>0</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>W8 (worry about parents)</td>
<td>83</td>
<td>17</td>
<td>80</td>
<td>20</td>
<td>80</td>
<td>20</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>W9 (worry about teachers)</td>
<td>92</td>
<td>8</td>
<td>80</td>
<td>20</td>
<td>100</td>
<td>0</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>W10 (worry won't pass)</td>
<td>58</td>
<td>42</td>
<td>80</td>
<td>20</td>
<td>80</td>
<td>20</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>W11 (nervous taking tests)</td>
<td>58</td>
<td>42</td>
<td>70</td>
<td>30</td>
<td>80</td>
<td>20</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>FLA12 (like English)</td>
<td>n/a</td>
<td>n/a</td>
<td>100</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>FLA13 (nervous don't understand)</td>
<td>83</td>
<td>17</td>
<td>70</td>
<td>30</td>
<td>100</td>
<td>0</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>FLA14 (difficulty reading)</td>
<td>75</td>
<td>25</td>
<td>90</td>
<td>10</td>
<td>100</td>
<td>0</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>ENV15 (go to good school)</td>
<td>83</td>
<td>17</td>
<td>90</td>
<td>10</td>
<td>100</td>
<td>0</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>ENV16 (teachers care)</td>
<td>75</td>
<td>25</td>
<td>90</td>
<td>10</td>
<td>100</td>
<td>0</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>ENV17 (school care)</td>
<td>8</td>
<td>92</td>
<td>10</td>
<td>90</td>
<td>100</td>
<td>0</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>ENV18 (pressured to test well)</td>
<td>92</td>
<td>8</td>
<td>60</td>
<td>40</td>
<td>60</td>
<td>40</td>
<td>60</td>
<td>40</td>
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