The Texas Examinations of Educator Standards:
An equal opportunity test for all prospective teachers in Texas?

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Abstract
This study examines the relationship between the reading abilities of preservice teachers enrolled in a South Texas university and their scores on the Texas Examinations of Educator Standards (TExES) Pedagogy and Professional Responsibilities (PPR) exam. The relationship between preservice teachers’ reading and certification examination scores were found to vary significantly based upon differences in ethnicity and first language. The construct validity of the TExES PPR as an equitable assessment of all preservice teachers’ future teaching effectiveness appears questionable based upon the findings of this study. Implications for teacher educators in response to bilingual preservice teachers that may struggle with a biased certification examination are discussed.

Introduction
Our nation’s diverse student population calls for the preparation of teachers who are motivated and prepared to teach students with varied backgrounds. Furthermore, the increasing diversity among the students in our schools creates a need for a more representatively diverse teaching force. In Texas, and nation-wide, prospective teachers must pass standardized certification examinations for entry into the teaching profession.

The standardized teacher testing movement gained momentum with the U.S. Supreme Court decision in 1978 upholding the National Teacher Examinations, U.S. v. State of California, 434 U.S. 1026 (Valencia & Aburto, 1991). Today, preservice teachers throughout the nation are required to pass state-mandated, timed, paper-and-pencil tests of pedagogical and content knowledge in order to become certified teachers (National Center for Education Statistics, 2003).

Standardized tests, including teacher certification examinations, have proven to be more difficult for students of color than their European-American counterparts (McIntosh & Norwood, 2004; Tellez, 2003; Wakefield, 2003). One of the major problems for minority students with standardized tests is that they are poor indicators of teacher success in the classroom because of affective variables not tested (Justice & Hardy, 2001). Whether the standardized testing process actually measures preservice teachers’ overall teaching effectiveness is less certain than its assessment of preservice teachers’ English language proficiency and test-taking skills.

Standardized, timed, paper-pencil tests of pedagogy tend to overly reward preservice teachers’ analytical and reading abilities (Hirsch, 2003). Most Hispanic Spanish-speaking bilinguals need extra time to process two languages possibly resulting in heightened anxiety and potentially undermine performance on timed tests (Sandoval &
Duran, 1998). Is it possible for a talented bilingual Spanish-first language preservice teacher to be disadvantaged at a level of reading comprehension required for standardized test success, yet still possess abilities of even greater consequence for teaching effectiveness? The question for teacher certification examinations is not if they are biased, but rather who is disadvantaged or privileged by the test and is the level of bias acceptable?

According to the 2000 U.S. Census (U.S. Census Bureau, 2000) there were 21,320,047 persons five years of age or older in the United States who spoke English “less than very well.” Of those persons who spoke English less than very well, over 60% were Spanish speakers. In the State of Texas, 32% of the population are Hispanics, of which, 27% or 5,195,182 speak Spanish in the home. Almost half of those Spanish-speaking Hispanic Texans describe themselves as speaking English less than very well.

The linguistic diversity among Spanish-speaking Hispanics includes Spanish monolinguals, Spanish-dominant bilinguals, English-dominant bilinguals, equally balanced bilinguals and English bilinguals (Rodríguez, 1992). LaCelle-Peterson and Rivera (1994) stated, “When it comes to languages, we believe that more is better, both for individuals and for the nation. Bilingualism is not an elusive goal, but rather a relatively common human experience, and an even more common educational goal” (p. 57). They suggest that rather than viewing the native languages of English learners as problems to be overcome, that our future teachers be prepared to build upon each student’s unique abilities.

The Spanish-speaking bilingual preservice teachers of Texas enter their teacher education programs with personal experiences and abilities needed to meet the needs of the state’s bilingual Hispanic students (Valencia & Aburto, 1991). If so, is the bilingual ability of prospective teachers valued and rewarded in the Texas teacher certification process? At the present time, passage of the Texas Examinations of Educator Standards (TExES) Pedagogy and Professional Responsibilities (PPR) exam is required for teacher certification in the State of Texas. Bilingual individuals have not done well on standardized tests (Chen & Henning, 1985; Scheuneneman & Oakland, 1998). Valdés and Figuerora (1994) contend that:

The testing of bilingual individuals has developed from the practice of testing monolinguals without the necessary examination of the assumptions underlying the measurement of monolingual abilities and the applicability of these assumptions and theories to the measurement of the same abilities in persons who function in two language systems. (p. 2)

The construct-related validity of the TExES PPR is based upon the assumption that the test serves to accurately assess the teaching effectiveness of the preservice teacher (State Board for Educator Certification, 2004). However, all tests normed on native English speakers are to some degree measures of English competency and proficiency (Bielenberg & Fillmore, 2005; Geisinger, 1994; Sandoval & Duran, 1998; Spurling & Ilyin, 1985). Test scores must be proven to reflect the intended constructs and also not to be measure of unintended influences.
Scheuneman and Oakland (1998) argue that rather than the question of whether or not a standardized test may be unfairly biased, the more pressing issue concerns its interpretation and use. Furthermore, test validation must go beyond providing evidence that simply supports the interpretations and uses of a given test. Test validation must, more importantly, address the consequences of how the test will be interpreted and used (Geisinger, 1992).

The unintended impacts of testing must be carefully evaluated. According to Cole and Moss (1989), the meaningfulness of a test must always take into account the context of its intended use. Test outcomes must be understood as producing intended and unintended outcomes or side effects. Does the TExES PPR represent a fair, accurate assessment of the teaching ability for the bilingual preservice teacher? Is the use of the TExES PPR as the ultimate gate-keeper for bilingual preservice teachers’ entry into the teaching profession appropriate?

The purpose of the study was to determine if significant differences existed in the relationship between preservice teachers’ reading abilities and their scores on the Texas teacher certification examinations based upon ethnic and first language characteristics. This paper addresses the following research question:

Does the reading ability of Hispanic Spanish-speaking bilingual preservice teachers have a significantly greater impact upon their teacher certification examination scores when compared with their monolingual counterparts?

Method

Participants

The research sample for this study consisted of 230 preservice teachers enrolled from Fall 2003 through Fall 2004 in the field-based teacher education program of a South Texas university. One hundred and ninety-two of the participants were female and 38 were male. Their ages ranged from 20 to 56, with over two-thirds of the participants falling between 21-26 years of age.

The sample reflected the ethnic composition of the south Texas region. One hundred and seventeen of the participants were Anglo and 100 were Hispanic, while the remaining 13 preservice teachers identified themselves as Black, Asian American, American Indian or other. Seventeen of the 100 Hispanic preservice teachers acquired Spanish as their first language.

Instruments

The Gates-MacGinitie Reading Test (GMRT) – Level 10/12 was used to determine a current, uniform measure of the preservice teachers’ reading abilities. The test was administered during the orientation meeting on the first day of class each semester from Fall 2003 through Fall 2004.

The Gates-MacGinitie Reading Tests are designed to provide a general level of reading achievement. The GMRT consists of a vocabulary section and a comprehension section. The GMRT assesses the preservice teachers’ word knowledge with 45 questions that begin with easy, commonly used words progressing to less common, more difficult words. The comprehension portion of the test consists of 11 passages of varying lengths.
and subjects. Preservice teachers are required to demonstrate understanding of both explicit and implicit information presented in the passages (MacGinitie, MacGinitie, Maria & Dreyer, 2000).

In order to become eligible to take the official TExES PPR the preservice teachers of this South Texas university are required to take a university administered practice certification examination known as the “Pre-TExES PPR.” The Pre-TExES was administered to each of the preservice teacher cohorts at a midway point during the semesters from Fall 2003 to Fall 2004 by the university’s College of Education faculty. Upon completion of the Pre-TExES the university preservice teachers register and pre-pay for the official TExES PPR on their own.

Results

The combined results of the vocabulary and comprehension portions of the Gates-MacGinitie Reading Test - Level 10/12 produced an extended scale score (ESS) for each participant. The extended scale scores, referred to as “GATESESS”, clustered near the upper end of the scoring scale varying across a relatively small range of scores. While high achievement of the preservice teachers on the Gates-MacGinitie Reading Test – Level 10/12 was expected, the range of scores indicated that the GMRT might be useful in assessing the relationship of preservice teachers’ reading abilities with their performance on the state-mandated teacher certification exams (Table 1).

Table 1
Descriptive Statistics of Preservice Teachers’ Scores on the Gates-MacGinitie Reading Test and the TExES PPR

<table>
<thead>
<tr>
<th>Measure</th>
<th>GATESESS</th>
<th>TEXES PPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>230</td>
<td>230</td>
</tr>
<tr>
<td>Mean</td>
<td>609.08</td>
<td>261.91</td>
</tr>
<tr>
<td>Median</td>
<td>605</td>
<td>263</td>
</tr>
<tr>
<td>Mode</td>
<td>626</td>
<td>263</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>32.98</td>
<td>16.56</td>
</tr>
<tr>
<td>Range</td>
<td>185</td>
<td>91</td>
</tr>
<tr>
<td>Minimum</td>
<td>512</td>
<td>202</td>
</tr>
<tr>
<td>Maximum</td>
<td>697</td>
<td>293</td>
</tr>
</tbody>
</table>

Preservice teachers’ scores on the TExES PPR, described in Table 1, were also clustered at the upper end of the scoring scale in a varied distribution across a small range of scores. As a criterion-referenced exam requiring a “passing” percentage of approximately 80%, this clustering at the upper end of the scoring scale for the TExES PPR was an expected achievement goal for the preservice teachers.
A “substantial” relationship (Williams, 1992, p. 137) was found between the GMRT and the TExES PPR as indicated by the Pearson correlation coefficient ($r$) of .540. The corresponding effect size ($r^2$) of over 29% between preservice teachers’ GMRT scores and their TExES PPR scores is considered to be a “large” effect size (Gravetter & Wallnu, 2004, p. 295). The limited range of the preservice teachers’ scores on these two measures acts to reduce $r$ and $r^2$ and therefore increase the meaningfulness of 29% common variance.

The ethnicity and first language of preservice teachers were found to significantly impact the relationship of preservice teachers’ reading abilities and teacher certification test scores. The correlation of Hispanic preservice teachers’ reading abilities with their certification examination scores, $r = .545$, compares to $r = 4.54$ for the Anglo preservice teachers. Thus, 30% ($r^2$) of Hispanic preservice teachers’ TExES PPR scores are explained by their GMRT scores, while only 21% of the Anglo preservice teachers’ certification exam scores are explained by their reading test scores.

The first language characteristic of the 17 bilingual Spanish-first language preservice teachers in this study was found to have a powerful influence upon their certification examination results. The preservice teachers for whom Spanish was their native language had a much stronger relationship between their GRMT scores and their TExES PPR scores than did the monolingual English-speaking preservice teachers. The correlation of the bilingual Spanish-first language preservice teachers’ reading and certification scores was $r = .705$ as compared to $r = .486$ for the monolingual preservice teachers (Table 2). The reading ability, as measured by the GMRT, of bilingual Spanish-first language preservice teachers’ produced an effect size of $r^2 = .497$ upon their teacher certification examination results, as measured by TExES PPR. Meanwhile, the English-speaking monolingual preservice teachers’ GRMT scores produced an effect size $r^2 = .236$ upon their TExES PPR scores. Thus, 50% of the variance ($r^2$) of the TExES PPR scores of students whose first language was Spanish was explained by their GMRT scores, while only 24% (less than half) of the English-first language preservice teachers’ TExES PPR scores were explained by their GMRT scores.

Table 2
*Pearson Intercorrelations of Preservice Teachers’ Scores on the GMRT and the TExES PPR based upon first language*

<table>
<thead>
<tr>
<th>First language</th>
<th>$r$</th>
<th>$r^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>.486</td>
<td>.236</td>
</tr>
<tr>
<td>Spanish</td>
<td>.705</td>
<td>.497</td>
</tr>
</tbody>
</table>

*Note.* All coefficients are significant at $p < .01$. 
The difference between the correlations of reading and certification exam scores for the groups of preservice teachers based upon language differences is particularly meaningful in light of the superior teacher certification examination results achieved by the English-first language preservice teachers. The native English-speaking preservice teachers’ average TExES PPR score was 264 compared with the average score for the 17 bilingual Spanish-first language preservice teachers’ average score of 246. The minimum passing score for the TExES PPR is 240, thus a score of 246 is only three and a half percentage points above a failing score.

Table 3
Descriptive Statistics of Monolingual English-First Language Preservice Teachers’ Scores on the GMRT and the TExES PPR

<table>
<thead>
<tr>
<th>Measure</th>
<th>GATESESS</th>
<th>TEXES PPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>209</td>
<td>209</td>
</tr>
<tr>
<td>Mean</td>
<td>612.81</td>
<td>263.64</td>
</tr>
<tr>
<td>Median</td>
<td>605</td>
<td>266</td>
</tr>
<tr>
<td>Mode</td>
<td>591</td>
<td>263</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>32.19</td>
<td>15.41</td>
</tr>
<tr>
<td>Range</td>
<td>185</td>
<td>91</td>
</tr>
<tr>
<td>Minimum</td>
<td>512</td>
<td>202</td>
</tr>
<tr>
<td>Maximum</td>
<td>697</td>
<td>293</td>
</tr>
</tbody>
</table>
Table 4
Descriptive Statistics of Bilingual Spanish-First Language Preservice Teachers’ Scores on the GMRT and the TExES PPR

<table>
<thead>
<tr>
<th>Measure</th>
<th>GATESESS</th>
<th>TExES PPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Mean</td>
<td>583.33</td>
<td>245.530</td>
</tr>
<tr>
<td>Median</td>
<td>584</td>
<td>253</td>
</tr>
<tr>
<td>Mode</td>
<td>584(^a)</td>
<td>250(^a)</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>24.74</td>
<td>17.37</td>
</tr>
<tr>
<td>Range</td>
<td>83</td>
<td>53</td>
</tr>
<tr>
<td>Minimum</td>
<td>543</td>
<td>211</td>
</tr>
<tr>
<td>Maximum</td>
<td>626</td>
<td>264</td>
</tr>
</tbody>
</table>

\(^a\) Multiple modes exist. The smallest value is shown.

Discussion

The reading ability of bilingual Spanish-first language preservice teachers had twice the influence (50% compared to 24%) upon their teacher certification examination scores as compared to the influence reading ability had upon the certification exam scores for monolingual English-speaking preservice teachers. Meanwhile, the average TExES PPR score for the bilingual Spanish-first language preservice teachers was barely above the minimum score required for teacher certification. Monolingual English-speaking preservice teachers, on the other hand, averaged over one standard deviation higher on their TExES PPR scores than their bilingual counterparts. Given the disparity of teacher certification examination results among preservice teachers attending this South Texas university based upon their native language, questions arise regarding the usefulness of the TExES PPR as an instrument for positive change and improvement in Texas schools.

Classroom situations calling for bilingual skills on the part of the teacher occur on a regular basis in South Texas. Is it possible for the certification examination process to actually recognize and reward bilingual ability? At the present time it appears that not only is a preservice teacher’s bilingual ability taken for granted in the certification process, it is actually a hindrance for some in becoming a fully certified teaching professional.

Conferring professional status upon a preservice teacher based upon the passage of a certification examination presumes that the exam represents a valid measure of teaching effectiveness. Assuming the validity of the measurement instrument itself, the more important issue concerns the appropriateness of the certification examination as a gate-keeping mechanism for entry into the teaching profession. Does the TExES PPR meet those expectations for test validity and appropriate use?

Cole and Moss (1989) identified three levels of intended outcomes concerning the use of standardized tests. At Level One an intended outcome is the identification
of persons with certain abilities and subsequent response based upon that identification. Does the TExES PPR facilitate the certification of future teachers that are highly qualified to meet the challenges faced by English learners in our Texas schools?

Level Two focuses upon usefulness of a test to make improvements. Does the TExES PPR serve as a means of certifying teachers that will go on to be successful in the classroom? Will the teaching force in Texas be strengthened and stabilized as a result of teachers becoming certified through the TExES process? And, in particular, will our English learners thrive and be up-lifted by teachers highly qualified to meet their unique learning needs?

Cole and Moss describe Level Three purposes as far-reaching, ultimate outcomes. In terms of the TExES PPR, does the certification examination process ultimately lead to an improved community and make the world a better place? Are the English learners in South Texas finding their educational experience in our Texas schools to be a vehicle for personal, social and economic satisfaction and achievement?

Just as there are different levels of intended purposes concerning the use of standardized test results, there are also different levels of side-effects. At the primary level of determining teacher certification in the State of Texas via the TExES, whether or not bilingual Spanish-first language preservice teachers are unfairly assessed on the TExES PPR is an important issue. A Level Two concern has to do with a possible negative impact the TExES PPR may have upon the diversification of the teaching force in Texas. Are we losing talented, capable prospective teachers who are bilingual through our current standardized testing teacher certification process? At even a higher level of purpose, the question arises concerning the development of our communities. Are we stifling the growth of our cities and state if we do not intentionally facilitate the recruitment of bilingual teachers as role models for the English learners of South Texas?

The standardized testing movement has dramatically impacted the process of teacher preparation in Texas, and across the nation, serving to erode the authority of teacher educators in determining the certification of prospective teachers. Testing has replaced teacher educators’ judgments concerning preservice teachers’ strengths and weaknesses. Special considerations or professional judgments regarding the certification of preservice teachers are no longer the domain of teacher educators (Wakefield, 2003).

Blocking preservice teachers from gaining teacher certification based on a timed, paper-pencil assessment despite ample evidence of their teaching effectiveness is questionable. Valdés (1994) states, “Standardized tests should not be used in any aspect of a decision-making process with bilingual populations” (p. 203). Given the difficulties in utilizing standardized tests as unbiased, useful measures of bilingual individuals abilities, he stresses the minimization of the potential harm of existing tests and development of alternative approaches to assessment.

If a standardized exit test is to be a state-mandated requirement of those entering the teaching profession there must also be provisions for teacher educators to make professional judgments and certification decisions for those who have proven their ability to teach effectively. Amedahe suggests that the practice of combining teacher certification examination scores with assessments of preservice teachers’ performance in their teacher
education programs provides a truer measure of teaching effectiveness (2001). A new paradigm for teacher certification might blend classroom demonstrations of teaching skills with standardized test scores. This holistic approach to teacher certification would represent a more equitable, research-based assessment of teaching effectiveness for preservice teachers for whom the existing standardized testing process is biased and incomplete.

The time is now for a creative approach aimed at the complex challenge of meeting the educational needs of the English learners in our Texas schools. Facilitating, rather than impeding, the certification of bilingual Spanish-speaking preservice teachers must be addressed by the educational leaders of Texas.
References


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